

Interagency and International Assignments and Officer Career Management

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Preface

Interagency and international processes have received renewed emphasis as a means to integrate diplomatic, economic, and military activities. The idea of specialists in interagency operations was broached in the National Defense Panel Report. (Congress mandated the Panel to assess the Defense Department's Quadrennial Defense Review and to address the future defense and security needs of the United States.) A former Chairman of the Joint Chiefs of Staff has suggested that applying the spirit of Goldwater-Nichols to the interagency process would increase the nation's power. The Senate Armed Services Committee directed the Secretary of Defense to conduct a study of the advisability and feasibility of establishing a cadre of officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments.

This report provides our assessment of the feasibility and advisability of the suggested course of action. Study findings should be of interest to military personnel managers, analysts, and policymakers, especially those involved in the evaluation of officer career management policy. The appendices contain details about our conceptual and modeling approach, which should be of more interest to the analytical community.

This research was conducted for the Under Secretary of Defense for Personnel and Readiness within the Forces and Resources Policy Center of RAND's National Defense Research Institute (NDRI). NDRI is a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the unified commands, and the defense agencies.

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Summary

Background and Purpose

In 1997, the National Defense Panel asserted that a major focus of U.S. national security policy should be maintaining and strengthening regional stability. Such a focus, it observed, requires constant integration of U.S. diplomatic, economic, and military activities. International and domestic interagency processes are key to this integration. Although numerous governmental organizations are involved in the formulation and implementation of national security and military strategy, reemphasizing the importance of such processes and making them more effective have emerged as more-recent themes.

To improve national security decisionmaking, the National Defense Panel envisioned the establishment of a cadre of civilian and military professionals who, through progressive interagency experience and education, develop critical capabilities needed to operate effectively across agencies.

Picking up on this suggestion, Congress directed the Secretary of Defense to study this idea further. Specifically, it asked for a report of the feasibility and advisability of establishing a cadre of military officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments.

This report presents the results of RAND's National Defense Research Institute research into this issue. It addresses the following questions:

- How many interagency and international positions by grade and military service would need to be filled by such a cadre?
- What career models would develop the capabilities required for such a cadre?
- Which of these career models is feasible in terms of being able to operate in the context of the existing officer personnel management system and in terms of ensuring a viable career track for officers?
- Which of these career models is advisable in terms of the objectives they are intended to accomplish?

How Many Positions

The feasibility of a career model is strongly influenced by the number and distribution of positions it is intended to provide officers to fill. However, the positions of interest were not readily identifiable in existing databases. Consequently, we considered two categories of interagency and international positions: those at the policy level and an expanded set reflecting positions at the operational and tactical, as well as the policy, level.

The first category is the most restrictive. Here, we were guided by the National Defense Panel's suggestion that indicated it had in mind a relatively small cadre of officers. Using a combination of billet files, the Joint Duty Assignment List, and the outside Department of Defense detail list, we identified approximately 330 interagency and international positions at the policy level. The distribution of these positions by service and grade is shown in Table S.1. Interestingly, some 75 percent of these positions are currently included on the Joint Duty Assignment List.

To ensure that we had identified the most complete set of interagency and international positions and to provide a basis for variations in our assessment of feasibility, we expanded our definition to include positions in organizations at the operational and tactical level. We use this much larger list for sensitivity analysis, to determine how robust our conclusions about feasibility are. The distribution of these approximately 1,500 positions by service and grade is shown in Table S.2. Only 45 percent of these positions are currently on the Joint Duty Assignment List.

Alternative Career Models

The military departments design structures, systems, and processes to identify, train, and manage officers in order to acquire and develop the capabilities needed to carry out tasks and activities that result in desired outcomes. Thus the design of a career model to be applied to a selected set of officers should be directly related to the capabilities it is intended to provide to those officers, who will then use those capabilities in operational assignments.

Today, the Department of Defense has a rich complement of career models designed to develop a range of capabilities essential for the conduct and support of military operations. To investigate the applicability of these career models to officers assigned to interagency and international positions, we developed a taxonomy based on the type of capabilities the models are intended to develop in the officers they govern. This taxonomy resulted in identifying a central career

Table S.1
Distribution of 330 Policy-Level Interagency
and International Positions

	By Service		By Grade (%)		
	No.	%	O-6	O-5	O-4
Army	104	32	45	48	7
Navy	71	22	38	54	8
Air Force	140	42	31	56	14
Marine Corps	15	5	20	67	13

Table S.2
Distribution of 1500 Interagency
and International Positions

	By Service		By Grade (%)		
	No.	%	O-6	O-5	O-4
Army	479	33	22	37	41
Navy	360	25	21	38	41
Air Force	513	35	26	37	37
Marine Corps	114	8	16	35	49

model focused on managing the typical “due course” officer and four major variations of this central career model. Using the taxonomy, we concluded that each of the variations could be used for managing officers assigned to interagency and international positions.

The officer personnel management system as it exists today evolved from a single officer career model generally applicable to all officers. Over time, particularly in the past sixty years, this single career model adjusted to changing needs. It remains, however, the core of the officer personnel management system today. We label the governing, central career model “managing the generalist.”

To respond to changing requirements, the single career model evolved variations that could better develop and sustain specialized or enhanced capabilities. We found that four primary variations on the central model had evolved: one for “managing leader succession”; a second for “managing competencies”; a third for “managing skills”; and a fourth for “managing the exception.”

Table S.3 summarizes the different career models in terms of the defining characteristics of the group being managed, the primary focus of the career model, and the key human resource practices that make up the career model.

Although officers assigned to interagency and international positions are not specifically managed as a separate group today, of the alternative career models

Table S.3
Career Model Summary

	Managing the Generalist	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Major focus	Developing general leadership competencies	Selection of future senior leaders	Intensive utilization of specialized competencies	Development of specialized capabilities	Managing assignments rather than managing the officer
Structure	Positions integrated into organization	Positions integrated into the organization	Positions generally organized as a separate functional organizational entity	Positions integrated into the organization	Positions integrated into the organization
Identification	Officer population at large	High potential officers; often central board selections for command	Membership in a profession or concentrated functional area, education often a prerequisite	Membership in a functional area	Availability
Assignment	Standard sequence of military service assignments	Standard sequence of service assignments with periodic assignments to key positions outside service	Continuous assignments in narrowly defined area	Standard sequence of assignments, with periodic assignments to specialty area	Assignment considered interruption to standard sequence of assignments

Table S.3—Continued

	Managing the Generalist	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Development	Vertical development: increasingly responsible positions and standardized professional military education (PME)	Vertical development through increasingly responsible positions, including key assignments and specialized PME	Development largely provided through practice, profession-related activities, conferences, periodic certification, advanced education; PME considered secondary	Vertical development through increasingly responsible positions and standardized PME (likely to be non-resident). Horizontal development through assignments and periodic educational opportunities	Training, as needed, for a particular assignment
Promotion	Based on past performance and potential	Based on past performance and potential; specific assignments/ education a prerequisite; promotion opportunity goals/floors	Separate competitive categories or promotion opportunity goals and/or floors	"Floors" needed to offset the assignments out of the normal flow	No special provisions
Rewards	No special rewards	Rewards derived via the promotion system	Special pays to reflect, in part, marketability and value to organization	No special rewards	No special rewards

considered, "managing the exception" and "managing leader succession" contain elements that reflect how such officers are currently managed.

Feasibility

We assessed the feasibility of each of these career models at two levels: first, at the level of the officer personnel management system as a whole, and then at the level of officer career tracks. We conclude that each of the career models, with minor modifications, is feasible at both levels.

In terms of the first level, we investigated whether a career model would "fit" within the current officer personnel management system. Because the career models we selected are currently used by the military services to manage officers, they have been shown to work in practice.

In terms of the second level, we analyzed the feasibility of each of the alternative career models in terms of its ability to manage officers assigned to interagency and international positions. In other words, we determined whether the career models could fill the available positions with officers having the requisite experience. We used a system dynamics model to ascertain the details of selection, assignment, promotion, and education needed to sustain a viable career track for officers assigned to interagency and international positions. The viability of the career tracks is shown to depend upon several factors: the total number of interagency and international positions, the distribution of these positions among the services, and the number and proportion of these positions at each grade.

We also used a system dynamics model to assess the effect of different career models on characteristics the officers bring to the interagency and international community—specifically, to the organizations to which these officers are assigned. These characteristics include

- breadth of interagency and international experience
- quality of service experience
- depth and currency of knowledge within the interagency and international community
- nature of the officers.

The effect of the career models on each of these characteristics is shown in Tables S.4–S.7.

Table S.4
Interagency and International Positions Filled by Officers Who Possess Prior Interagency and International Experience

Career Model	O-4	O-5	O-6
Managing leader succession	None	Few	Most
Managing competencies	Half	Most	Most/all
Managing skills	None	Few	Most
Managing the exception	None	None	Few

Table S.5
Depth and Currency of Interagency and International Experience at Each Grade

Career Model	O-4	O-5	O-6
Managing leader succession	None	Low	Medium; current through education only
Managing competencies	Low	Medium	Deep; current through education and experience
Managing skills	None	Low	Medium; current through education only
Managing the exception	None	None	Low; current through education only

Table S.6
Quality of Within-Service Experience

Career Model	O-4	O-5	O-6
Managing leader succession	High	High	High
Managing competencies	Low	Low	Low
Managing skills	Average	Average	Average
Managing the exception	Low	Low	Low

Table S.7
Nature of Officers Assigned to Interagency and International Positions

Career Model	Nature
Managing leader succession	Likely future flag
Managing competencies	Interagency and international expert
Managing skills	Typical service experience, but perceived lower quality
Managing the exception	Available

Advisability

To a large extent, the advisability of using a career model depends on whose perspective is being used. During the course of the study, we found three primary perspectives represented: the individual officer, the interagency or international organization to which an officer is assigned, and the officer's military service.

In order to evaluate the advisability of a career model from each of these perspectives, we needed appropriate criteria. A career model is neither good nor bad in an absolute sense. It has advantages or disadvantages only in terms of what it is attempting to accomplish—in other words, the objectives it is designed to achieve. Its advantages and disadvantages, its benefits and costs, are most appropriately assessed in the context of the objectives or ends sought by those affected by its operation. We focused on the ends that are important to those holding each of the three perspectives delineated above. The career models are one of the means that affect how well those ends can be accomplished. Different perspectives have different objectives. These objectives formed the criteria against which we assessed advisability.

We derived objectives for each perspective based on our interviews, literature reviews, and prior research. We identified three major objectives (and a number of components for each objective) for each of the three perspectives, as follows:

- The individual officer
 - Ability to contribute
 - Security
 - Rewards
- The user organization
 - Contribution to organization mission
 - Ability to control resources (i.e., officer characteristics)
 - Cost
- The military service
 - Contribution to service mission
 - Resource management
 - Cost.

We ranked the career models based on our judgment of how well a given career model would meet the objectives of each of the three perspectives. Using a spreadsheet tool, we weighted all the objectives and the different perspectives to

compute an overall preference for career models. Because we had no data on which to assess relative preferences, we used equal weights as a baseline and then varied the weights to draw more-general conclusions. Table S.8 below summarizes the results for the case where the perspectives and all the objectives receive equal weight. The entries in the table reflect the ranking of the alternative career models ("1" is better than "4") for each of the perspectives.

Our analysis of this baseline case suggested the following:

- Individual officers assigned to interagency and international positions would prefer a career model that managed competencies or leader succession. These models score high against all three objectives held by this perspective.
- The user organization would prefer a career model that managed leader succession. This model scored high against the objective of contribution to mission and control of resources, but low on the cost objective.
- The military services would prefer a career model that managed skill or exception, although this overall preference seems slight and more as a result of being "the least of all evils." A greater emphasis on the objective of resource management would enhance the preference for a career model that managed competencies.
- Because both the individual officer and user organizations prefer a career model that manages leader succession or competencies, these two models are preferred overall—when all perspectives and objectives are weighted equally.

We used our spreadsheet model to conduct a sensitivity analysis of the weights placed on the objectives and their components. Our sensitivity analysis suggested the following:

- Generally, we found that for user organizations and military services, specific weights given to particular objectives could lead to a preference for

Table S.8
Assessing Career Models Against Perspectives

Perspective	Career Models			
	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Individual officer	2	1	3	4
User organization	1	2	4	3
Military service	4	3	2	1

each career model. For individual officers, however, no combinations of weights could lead to a preference for career models that manage skills or manage the exception.

- If the individual officer's perspective is afforded a relatively low priority, and if equal priority is given to the perspectives of the user organization and the military services, no clear preferences exist. In the absence of a decision about which of these two perspectives is more important, remaining with status quo career management practices seems most likely. However, as the individual officer's perspective is given increasing weight while maintaining equal weights for the other perspectives, managing leader succession and managing competencies emerge as the preferred career models.

Conclusions

Overall, we conclude that each of the four career models we considered is feasible for establishing a cadre of officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments. We also conclude that advisability is in the eye of the beholder. Where one stands on the advisability of a particular career model depends largely on what objectives one holds important. Consequently, we make no recommendations regarding the "best" career model because we believe that such a recommendation has to do (or, at least, should have to do) with the nature of the work done by the group of officers and the value of that work to national security. Specifically, what is the relative importance of these positions? How do they fit into the structure of national security? How do they relate to the outcomes that are important to national security? We see one of the advantages of the framework we have developed as focusing the discussion on the value of these positions to national defense in the future. If they are viewed as key operational positions, then they should be intensely managed for leader succession. If they are viewed as contributors to important, but common, outcomes requiring generic expertise, then they should be less intensely managed as a skill. If they are viewed as direct, substantial contributors to important specialized outcomes requiring generic expertise, then they should be intensely managed as a competency. Depending on the answers, the ways in which officers who fill these positions are identified, trained, and managed will vary. We suggest that the appropriate career model be determined to a large degree by the answers to such questions.

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1. Introduction

Background

In its 1997 report,¹ the National Defense Panel asserted that a major focus of U.S. national security policy should be maintaining and strengthening regional stability. Such a focus, it observed, requires constant integration of U.S. diplomatic, economic, and military activities. International and domestic interagency processes are key to this integration. Thus, the idea of specialists in interagency operations was given visibility in the National Defense Panel report.

Numerous governmental organizations are involved in the formulation and implementation of national security and military strategy. "Instilling unity of effort at the national level is necessarily a cooperative endeavor involving a variety of Federal departments and agencies" (Joint Pub 1, 1995). The military is also involved in interagency processes. For example, a joint staff publication (CJCSM, 1996) that lists tasks to be accomplished includes a strategic umbrella task (foster multinational and interagency relations) that is elaborated with multiple subtasks.

However, reemphasizing the importance of such processes and making them more effective have emerged as more-recent themes. General Shalikashvili, then Chairman of the Joint Chiefs of Staff, outlined three key ideas in a December 1996 speech (Shalikashvili, 1996). "The most important area for improvement that I hope we can celebrate ten years from now is the emergence of a broad reform movement, focusing on our national security structure, and taking into account the entire interagency process." He felt the key was to make sure that the military was an "integrated part of a larger comprehensive national plan, and not in itself the main plan, or even worse, the only developed and exercised plan." He suggested that applying the ideas and spirit of Goldwater-Nichols to the entire interagency process would yield great gains in the nation's power.

Since then, numerous articles and official publications have focused on the interagency process. For example, Hays and Weatley (1996) devoted a chapter to problems in interagency political-military planning; Swan (1996) discussed the cultural gaps between military forces and nongovernmental organizations

¹National Defense Panel, *Transforming Defense: National Security in the 21st Century*, December 1997.

(NGOs); and Schnaubelt (1996) discussed decisionmaking in multiagency operations. More recently, Gibbings, Hurley, and Moore (1998) examine interagency culture and the establishment of full interagency teams within the headquarters of each U.S. regional commander-in-chief (CINC). In a report for the Army, Taw (1997) suggests the Army must find a balance at all levels—policy, operational, and tactical—in which it contributes to certain types of interagency operations. Pirnie (1998) looks at several working models of the interagency process and ways to improve communication between civilian and military communities. Steele (1999) discusses “building deep coalitions among interested partners both inside and outside government, and among international organizations and allies.” The first edition of Joint Pub 3-08, *Interagency Coordination During Joint Operations*, was published in October 1996 and provides the principles and guidance for accomplishing interagency coordination and outlines responsibilities and tasks (Joint Staff, 1996).

National Defense Panel (NDP) Recommendation

In its December 1997 report, the NDP suggested the creation of an interagency cadre of professionals to staff key positions within the national security structure. It expressed the view that the spirit and intent of “jointness” could extend beyond U.S. forces to the U.S. interagency process and to interalliance venues.

To improve national security decisionmaking, the NDP envisions the establishment of a cadre of civilian and military professionals who, through progressive interagency experience and education, develop the critical capabilities needed to operate effectively across agencies.

Purpose of This Report

In its report on the FY 1999 National Defense Authorization, the Senate Armed Services Committee (SASC) directed the Secretary of Defense to conduct a study of the feasibility and advisability of establishing a cadre of officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments. The specific issue raised by SASC for study is military officers in the interagency and international environment.

Scope, Analytical Approach, and Report Organization

Because of limits on time and resources, we address only the issue of managing officers into, through, and from interagency and international assignments as raised by the SASC. We do not analyze the interagency process per se.

In Section 2, we use several databases to determine the numbers, grades, and military service of the kinds of positions to which a cadre of such officers might be assigned. In Section 3, we specify different career models that could be used to manage officers in interagency and international assignments. These different career models are variations of the existing officer career management model that serves as a baseline for our feasibility and advisability assessments. In Section 4, we analyze the feasibility of these career models using a system dynamics model to assess the training, assignment, and promotion interactions for each career model given likely interagency and international positions. In Section 5, we address the advisability of identifying, training, and managing officers under each of these career models using a criterion-based multiobjective approach. Section 6 contains our conclusions about the specific question as well as additional observations that emerged from our study. The appendices detail our conceptual and modeling approach.

2. Identifying Interagency and International Positions

To determine the feasibility of managing officers under different career models, we needed to know the characteristics of potential interagency and international positions. We did not need to know which exact positions would be included, but we did need the number of officers, their grades, and their services.

Identifying Potential Positions

We started with the broadest possible definition of interagency and international matters and identified positions on the basis of *location*. Defined separately, interagency and international assignments account organizationally for a large number of positions. These positions are found in a number of places:

- Outside the Department of Defense (e.g., with departments or agencies of the U.S. government such as the State Department; with the armed forces or governments of other nations; with international military or treaty organizations, such as NATO; with regional and international organizations, such as the United Nations; or with nongovernmental organizations, such as the American Red Cross¹)
- Inside the Department of Defense but outside the service (Office of the Secretary of Defense (OSD), Joint Staff, CINCs)
- Inside the service (i.e., officers assigned to service organizations and units but whose primary duties involved service with the types of organizations listed above²).

We also attempted to identify positions by the *duties of the positions*. For the most part, we identified positions in the above organizations whose duties involved national security strategy, national or international policy development, strategic matters with long-term and significant effect, politico-military matters, and

¹We use *nongovernmental organization* synonymously with *private voluntary organization* (PVO). Joint Pub 3-08 provides a summary listing of both kinds of organizations.

²Each of the services, for its own needs or in response to DoD Directives, has officers in programs and positions that are closely related to the positions of interest. A good example of this is the Foreign Area Officer Program mandated by DoD Directive 1315.17 (DoD, 1997a).

policy support to national or international decisionmaking bodies. We did not use *time spent on interagency matters* as a variable for identifying positions because we had no information on this for potential positions.³

We were guided in our definition by existing directives and instructions, e.g., Joint Publication 3-08. Also, we were able to use recent work in the interagency arena, such as that of Pirnie (1998), Taw (1997), and Daly and Weatley (1996). In particular, Joint Pub 3-08 has an interagency model that defines three levels of interagency involvement (policy, operational, and tactical) that were useful in identifying positions.

Ultimately, we narrowed the focus of our working definition to include positions with organizations that are both interagency and international (national security). We attempted to include only the duties described above. As a result, we tended to exclude many positions in such organizations as the Department of Justice, Department of Transportation, Department of Energy, and Department of Commerce.

Position Versus Activity

Possible positions can be identified in two ways. It could be done in a top-down fashion by identifying all activities that fit the definition for interagency and international organizations and duties. Alternatively, it could be done bottom-up by reviewing every position one by one to validate inclusion as an interagency and international position. The first way runs the risk of including positions that are in interagency and international organizations but whose duties (e.g., administrative or financial) might not fit the duties of interest. The second way runs the risk of excluding positions that are interagency and international, and—if special personnel management practices are to be accorded to the identified group—of creating “have” and “have not” positions within agencies. (Both of these potential problems continue to affect the Joint Duty Assignment List (JDAL) identification process.)

Sources of Data

We identified several possible sources of data for position information. First, the Defense Manpower Data Center maintains the “billet” files about each service.

³These three variables are derived from Joint publications, from other reports on interagency and international matters, or from studies of joint duty positions that defined duties and time spent as key identifying variables.

While there are no precise codes in those data files to identify the positions of interest, we could use certain program element codes as a basis for identifying groups of officers in related activities. Second, the joint duty assignment list is itself a source for many of these positions—it already includes many of the positions of interest. Third, although the services themselves have limited data on the positions of interest, we were unable to determine codes for identifying positions or individual officers. The services could identify related positions (e.g., foreign area officers in the Army and national security officers in the Navy), but these codes seemed to include more than what we desired. A fourth source of data is the list of officers detailed outside the Department of Defense for assignments of predetermined duration (DoD, 1997a).

Interagency and International Positions for Our Analysis: Numbers, Services, Grades

Ultimately, we used a combination of the billet file, the JDAL, and the outside DoD detail list to estimate numbers, grades, and services. We identified organizational activities (e.g., Office of the Undersecretary of Defense Policy, Joint Staff, Department of State, CINCs) in a top-down fashion and then, within these activities, worked bottom-up by applying a set of rules and judgments dealing with organizational subactivities, position titles, and duties to reduce the list.

For our primary feasibility analysis, we were the most restrictive in identifying interagency and international positions in which officers might serve. We limited the definition to the national policy level of interagency and international matters and used all sources of data to make a combination activity and position screen for positions. For example, we included many Under Secretary of Defense (Policy) activities within OSD. In the Joint Staff, we started with certain activities and screened for positions whose duties seemed to reflect our definitions. We were also guided by interviews with those who had developed the National Defense Panel recommendations and who stated they had a reasonably small number of positions in mind. Proceeding in this fashion, we identified approximately 330 interagency and international positions for analysis. The distribution of these positions by service and grade is shown in Table 2.1. Not surprisingly, since most of these positions are in outside service positions in the Washington, D.C. area, some 75 percent are also included on the Joint Duty Assignment List.

For the second part of our feasibility analysis, we expanded the definition to include positions in organizations at the operational and tactical level. We use

this much larger list for sensitivity analysis, to determine how robust our conclusions about feasibility are. The distribution of these approximately 1,500 positions by service and grade is shown in Table 2.2. Because many of these positions are internal to a service, only 45 percent are currently on the Joint Duty Assignment List.

The next section discusses establishing career models for a cadre of interagency and international officers.

Table 2.1
**Distribution of 330 Policy-Level Interagency
and International Positions**

	By Service		By Grade (%)		
	No.	%	O-6	O-5	O-4
Army	104	32	45	48	7
Navy	71	22	38	54	8
Air Force	140	42	31	56	14
Marine Corps	15	5	20	67	13

Table 2.2
**Distribution of 1500 Interagency
and International Positions**

	By Service		By Grade (%)		
	No.	%	O-6	O-5	O-4
Army	479	33	22	37	41
Navy	360	25	21	38	41
Air Force	513	35	26	37	37
Marine Corps	114	8	16	35	49

3. Career Models: Designs and Operational Descriptions

The report of the Senate Armed Services Committee directs the Secretary to study the "advisability and feasibility of establishing a cadre of officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments." The mechanism through which the department would manage a cadre of officers is a career model. It is the career model through which officers are selected, trained, assigned, promoted, rewarded, and separated.

But on what basis is one career model chosen over another for a particular group of officers? We believe that it has to do (or, at least, should have to do) with the kinds of capabilities the group of officers is expected to possess.¹

Why focus on capabilities? In the broadest sense, to carry out its mission, an organization acquires human (and other) resources that possess or can gain certain capabilities that, when effectively employed, produce desired organizational outcomes. For example, officers, individually and collectively, provide capabilities that produce outcomes important to the organizations in which they serve. The military departments design structures, systems, and processes to identify, train, and manage officers in order to acquire and develop the capabilities needed to carry out tasks and activities that result in desired outcomes. Thus the design of a career model to be applied to a selected set of officers should be directly related to the capabilities it is intended to provide to those officers, who will then use the capabilities in operational assignments.

This section describes career models from the perspective of the capabilities they are designed to develop and sustain.² Within this context, we develop a taxonomy consisting of the central career model used to manage the typical "due

¹Clearly, variations in career models evolved over time to meet particular needs. The result might be considered a form of the "survival of the fittest," where the fittest career models are those that provide the best match between the capabilities provided and the organization's needs. We are seeking to elaborate a taxonomy that links the types of capabilities desired to a particular form of career model, eliminating a trial-and-error approach.

²Career models can be described in a variety of ways: the results of their application on the officers affected (promotion opportunities, retention rates, average length of tours; the design parameters on which the system is based (horizontal vs. vertical development, single vs. multirater evaluations, pay for longevity vs. pay for performance); the policies and practices that are applied to the officers (up-or-out policy, high mobility, or equal opportunity). We found the perspective of capabilities, however, to be more useful in developing a parsimonious taxonomy.

course” officer and four existing variations of this career model that could be used for managing officers assigned to interagency and international positions. The framework is developed fully in Appendix B. Section 4 assesses the feasibility of each of these variations and describes the conditions under which they are feasible for managing officers assigned to interagency and international positions. Section 5 evaluates the advisability of the career models in terms of the objectives held by individual officers, the organizations that use officers assigned to interagency and international positions, and the military service in which they serve.

Career Models

The officer personnel management system as it exists today evolved from a single officer career model generally applicable to all officers. Over time, particularly in the past sixty years, this single career model has adjusted to changing needs. It remains, however, the core of the officer personnel management system today. It is currently based on the Defense Officer Personnel Management Act (DOPMA) (whose predecessors were the Officer Personnel Act and the Officer Grade Limitations Act).

DOPMA and its predecessors all focused on the *raison d’être* of the services—the officers that comprise, and directly support, the operational forces. As noted in Appendix B, these officers, at times, are assigned to positions that elicit military-specific capabilities and, at other times, generic capabilities. These officers contribute mainly and substantially to the primary outcome of a military organization—winning the nation’s wars. It has been a flexible career model—up to a point. We label the governing career model “managing the generalist.”

However, to respond to changing requirements, the single career model gave way to variations that could better develop and sustain new or enhanced capabilities. We found that four primary variations on the generalist model evolved: one for managing the critical capability³ (“managing leader succession”); a second for managing key resources (“managing competencies”); a third for managing specialists (“managing skills”); and a fourth for managing core support (“managing the exception”).

In the next subsection, we discuss each of these career models. We start with a brief description of the core design, “managing the generalist.” This is the DOPMA-based career model for officers and is well understood. We then

³Officers who will eventually exercise the highest levels of command.

discuss, in greater detail, each of the other career models in turn, providing examples of groups of officers currently managed by that career model⁴ and summarizing how officers assigned to interagency and international positions could be managed under such a career model. Of the alternative career models, “managing the exception” and “managing leader succession” have elements that represent how officers assigned to interagency and international positions are managed today. Table 3.1 summarizes the different career models in terms of the defining characteristics of the group being managed, the primary focus of the career model, and the key human resource practices that comprise the career model.

Managing the Generalist

Officers are managed to ensure that the service’s core capabilities are maintained. As a result, this career model (DOPMA, at present) is designed to identify, train, and manage officers to ensure that they possess the mix of military-specific and generic capabilities to achieve the primary outcome of winning the nation’s wars. This is the most general of the career models. “Managing the generalist” is associated with what is known as a “due course” officer and is the foundation for the other career models.

Primary Focus and Key Human Resource Practices

This career model focuses on developing a common set of capabilities that can be employed to carry out the tasks required in a wide range of positions; it focuses on developing general leadership competencies.

Officers are assigned to a variety of positions where the leadership role is the major factor—the defining capability—in successful accomplishment of the tasks and activities performed. As a result, they all receive similar precommissioning, basic, and advanced training. They are evaluated using a common instrument and rated in terms of common (leadership) traits. Though often oriented to different functional areas, advanced training provides common leadership training and experiences. Additional development is accomplished primarily through a standardized sequence of assignments to operational units and common required professional military education. Assignments are primarily

⁴We give examples of officers who are managed by each model in order to help understand the models. These examples reflect the preponderance of practice across the services, but exceptions exist. For example, in some services, many officers stay in support skills for an entire career and would appear to be under a competencies model rather than a skills model. In some services, acquisition officers appear to be under a skills rather than a competencies model.

Table 3.1
Career Model Summary

	Managing the Generalist	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Major focus	Developing general leadership competencies	Selection of future senior leaders	Intensive utilization of specialized competencies	Development of specialized capabilities	Managing assignments rather than managing the officer
Structure	Positions integrated into organization	Positions integrated into the organization	Positions generally organized as a separate functional organizational entity	Positions integrated into the organization	Positions integrated into the organization
Identification	Officer population at large	High potential officers; often central board selections for command	Membership in a profession or concentrated functional area, education often a prerequisite	Membership in a functional area	Availability
Assignment	Standard sequence of military service assignments	Standard sequence of service assignments with periodic assignments to key positions outside service	Continuous assignments in narrowly defined area	Standard sequence of assignments, with periodic assignments to specialty area	Assignment considered interruption to standard sequence of assignments

Table 3.1—Continued

	Managing the Generalist	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Development	Vertical development: increasingly responsible positions and standardized professional military education (PME)	Vertical development through increasingly responsible positions, including key assignments and specialized PME	Development largely provided through practice, profession-related activities, conferences, periodic certification, advanced education; PME considered secondary	Vertical development through increasingly responsible positions and standardized PME (likely to be non-resident). Horizontal development through assignments and periodic educational opportunities	Training, as needed, for a particular assignment
Promotion	Based on past performance and potential	Based on past performance and potential; specific assignments/ education a prerequisite; promotion opportunity goals/floors	Separate competitive categories or promotion opportunity goals and/or floors	"Floors" needed to offset the assignments out of the normal flow	No special provisions
Rewards	No special rewards	Rewards derived via the promotion system	Special pays to reflect, in part, marketability and value to organization	No special rewards	No special rewards

tailored to provide increasing levels of responsibility. Both development and assignments are designed to integrate the different functional areas with an orientation toward the primary mission of the service. The objective is to develop breadth of knowledge and experience. Officers compete for promotions against each other on the basis of performance and potential regardless of their functional areas.

The Foundation for Other Career Models

Variations on this general career model have arisen in practice as the capabilities employed by groups of officers changed in terms of their contribution to different types of outcomes or as the capabilities of the group became more concentrated in military-specific or generic activities. However, because of the importance of the core capability, leadership, these variations are primarily modifications of the generalist career model. As such, although many of the elements of the generalist career model are prominent in each of the variations, other elements (the focus and the human resource practices), important to developing and sustaining the capabilities required, differ. In other words, the general career model is the foundation for the development of the other career models, and the variations arise in practice as the activities performed by a group of officers require a shift in capabilities.

Managing the Exception

Many positions require military-specific capabilities that contribute to important but common outcomes. The career model described in this subsection addresses positions that require a military officer but that an officer from a variety of backgrounds can fill. The generalist role of leadership is the important capability (the capability developed by the "managing the generalist" career model), not a capability based on an expertise in a particular functional area. Reflecting performance of a wide range of important activities, the officers assigned to these positions provide core support for the organization. Examples of positions based on such capabilities include recruiting, training, and base operations. These are positions in which an officer serves and then returns to assignments more closely aligned with his or her standard career path. We label this variation in the general career model "managing the exception."

Primary Focus and Key Human Resource Practices

To a large extent, managing the exception is a career model that manages the process of making assignments to fill positions lying outside a traditional career

path. In other words, the focus is on managing the *assignment process*, rather than on managing *officers* in the broader sense of the term.⁵

Under this career model, officers are identified and selected for these assignments primarily in two ways. The first, and usual, means is initiated by a general requisition from the requesting organization. The requisition specifies the grade, possibly a military specialty and other qualifications (for example, language skills, technical expertise, prior experience) depending on the position. The services tend to fill these requests by identifying the pool of officers with the required characteristics who are potentially available (for example, nearing the end of their current assignment, not selected for a follow-on assignment, not being considered for school, command, etc.). To varying degrees, the services approach prospective candidates and attempt to convince them to accept the assignment. Many of these assignments are considered less career-enhancing than assignments within the operational component of the military service, to the military service headquarters, or to the joint staff. Officers selected for these positions are often less likely to develop or enhance capabilities that are necessary for achieving primary or major specialized outcomes. The second means, less desirable from the service's point of view, is initiated as a "by name request."

The officer may receive brief training before assuming a position. For example, officers assigned to positions as garrison commander attend a garrison commanders' school. The career model serves to distribute the burden of filling the positions across as many officers as possible in an equitable manner.

"Career model" may be overstating the degree of management of these officers. However, these are neither uncommon nor unimportant positions, and they need to be managed effectively.

Application to Officers Assigned to Interagency and International Positions

A career model that focuses on managing the exception could be applied (as is largely the case today) to officers assigned to interagency and international positions. Under this career model, the officers identified and selected for interagency and international assignments would not necessarily be trained or managed as a separate category. They would be managed under the general framework of DOPMA (i.e., managing the generalist) and could be identified,

⁵This perspective is slightly different from that employed for the other variations.

trained and managed as part of one or more other existing career models (for example, those applying to joint duty, acquisition, or medical officers, etc.). They would be assigned to interagency and international positions as an exception to the standard career path.

Officers being considered for these positions would receive no special training or development before being selected other than that which, by happenstance, is provided through assignments and training primarily intended to serve the developmental needs of the officer's primary career management system.

Officers would be considered for promotion as part of the primary career management system that applies to them, independent of their assignment to interagency or international positions. The assignment to interagency or international positions, in many cases, would not be a positive factor in the promotion consideration, regardless of how well the officer performed in that assignment, because it would not be perceived to contribute to development (particularly depth) in the officer's primary career field. Single assignments would be the norm. The main exception would be for officers who remain (through choice or influence from the organization's senior leadership) for extended or multiple contiguous tours with the interagency or international organization. In these cases, the officer would be effectively removed from the applicable career system and much less likely to be promoted or considered for career-enhancing assignments in the military service.

These assignments, by their very nature, can significantly contribute to the breadth of experience of the officer and can contribute immeasurably to personal growth and self-confidence, general leadership competencies, and the development of a broader world view. However, these assignments usually would not contribute to the officer's depth of experience, particularly in his or her chosen career field. But to the degree that officer characteristics, in general, are needed to serve successfully in these positions, a career model that manages the exception satisfies the assignment need. Of the variations considered, this career model represents the minimum amount of management of officers assigned to interagency and international positions.

Managing Leader Succession

The capabilities of the senior leadership are what make an organization successful. The career model described in this subsection intensively manages a group of officers that becomes more select as their longevity increases, to ensure the availability of highly qualified future leaders of the organization. These officers require military-specific capabilities that contribute directly to major

military-specific outcomes sought by the organization. Exceptional performance, in command or in other positions of special importance, is the sine qua non for this group; the officers assigned to these positions provide the critical capabilities for the organization. Examples of positions requiring such capabilities include the leadership of successively larger military organizations and the conduct of major joint operations. We label this career model, "managing leader succession."

Primary Focus and Key Human Resource Practices

The primary focus of this career model is the development and selection of future senior leaders. Identification of future leaders is a lengthy process. The egalitarian values of a military organization, together with the difficulty of identifying the limited set of officers with the traits and characteristics necessary to excel, result in a career model that "tests" the vast majority, especially early in their careers.

The generalist career model heavily influences this variation. For example, human-resource practices that comprise this career model extend and emphasize the practices of the generalist career model as it applies to those officers in the combat arms in the Army, pilots in the Air Force, and unrestricted line in the Navy.⁶ Specifically, as experience increases, assignment begins to receive the greater focus in this career model. As they proceed through a career, officers are subjected to increasingly intensive screening for selection to a limited number of command positions, implemented through command boards. The positions serve a dual function: development and evaluation.

Similarly, a primary component of this career model is the assignment of officers to a series of increasingly responsible, and often key, positions to develop further the capability to lead on the one hand, and to evaluate performance in this demanding environment, on the other. Formal development through professional military education and, in some cases, through specialized joint PME is a secondary component. Although this career model provides no special monetary rewards for its officers, rewards are provided through the promotion system via generally higher promotion rates.

Prior to Goldwater-Nichols, the assignments under this career model focused on positions internal to the officer's military service; external assignments were

⁶Other categories have attempted, more or less successfully, to model the career model of the warriors; but it is the warrior career model that sets the framework for the variations on the general model and that focuses the variations for managing the critical capabilities.

considered under a career model that managed the exception. With the growing emphasis on joint operations, the capability to achieve the major specialized outcome of seamless joint operations relies on understanding and competence in the joint environment. The set of positions was thus enlarged to accommodate development and evaluation in the joint environment, as well. In part because the capability to function in a joint environment was not universally viewed as contributing directly to desired organizational outcomes,⁷ proponents of jointness tailored this career model to accomplish their end. Among other modifications, it includes a requirement for certification as a joint services officer (JSO), identification of critical positions that JSOs are intended to fill, and metrics to ensure that the services' best officers—those in the leader succession model—are being assigned to fill joint positions. However, the application of the managing leader succession career model to joint officers retains its primary focus on *assignment* as the key element.

Application to Officers Assigned to Interagency and International Positions

As noted in the previous section, we found a high correlation between potential interagency and international positions (at the national policy level) and those on the joint duty assignment list (JDAL). This suggests that many officers assigned to interagency and international positions are currently under a career model that manages leader succession. To the degree that such overlap is insufficient (particularly at the operational or tactical level), the management of officers assigned to joint positions offers two possible variations of the career model to manage leader succession for officers assigned to interagency or international positions. Both variations require preparatory education. In addition, one focuses on a single tour and certification as an experienced asset; the other focuses on repetitive tours.

Joint duty was developed to ensure that high-quality officers are selected to serve in joint assignments. It provides for common educational preparation to enable these officers to function more effectively when assigned to joint positions. Joint experience is considered an important characteristic, the possession of which is required for selection for general officer. This results in a population certified by education and assignment. If preparation for interagency and international assignments is essential and such experience is a necessary prerequisite for

⁷Some viewed desired outcomes from a narrower, service perspective, while others viewed the desired outcomes from a broader, defense-wide perspective.

selection for flag and general officer, this joint duty variation of the career model would meet those needs.

If the leader succession career model governed interagency and international assignments, a large number of officers should be exposed to these assignments under the assumption that these types of assignments are critical to developing the competencies required by the senior leadership of the military of the future. However, the number of potential candidates for an eventually very limited number of the most senior interagency and international positions is very large. To ensure that the most likely candidates for flag and general officer will have obtained the requisite experience, most officers considered "above average" must be selected for interagency or international assignments. The services would screen for those officers who will be competitive for promotion to the next grade, as well as possessing the potential to be future general officers.

Applying this career model to officers assigned to interagency and international positions would require an officer to participate in professional military education that is designed to provide a better understanding of the nature of the interagency or international assignment. The professional military education would serve several purposes. It would familiarize the officer with the importance of the assignments to the overall national military strategy. It would expand the knowledge of operations in an organization external to, but closely associated with, the military services. It would also define the role the officer is expected to perform and provide the skills needed to perform that role effectively. The officials we interviewed who believe officers should receive education before being assigned to an interagency or international position generally agreed that a course of the duration of the current Joint Professional Military Education would be appropriate. A member of the National Defense Panel suggested that greater contact between the Foreign Service Institute and the National Defense University would be one means of developing a broader perspective. He would like to see the National War College, Industrial College of the Armed Forces, and the Foreign Service Institute viewed as three separate colleges on the same campus, through which students would rotate, for perhaps three months at a time.⁸

Not all positions in interagency and international organizations would necessarily provide credit for an interagency or international assignment. Only those positions that demonstrate a direct link to the capability to carry out the national military strategy should provide credit. Those that should be included

⁸Interview, March 26, 1999.

would be placed on an Interagency/International Duty Assignment List (IIDAL). Completion of the professional military education and assignment to a position on the IIDAL would result in certification as International/Interagency Service Officer (IISO).

Preferably, the professional military education would be conducted prior to the interagency or international assignment. As with joint duty, however, limited approval to complete professional military education after one or two assignments to an IIDAL position could result in certification. The application of this variation of the career model would require a full three-year tour for credit with limited exceptions granted for shorter tours. This career model would manage officers to ensure that they were not disadvantaged by being selected and assigned to interagency and international organizations. Their promotion opportunities would be monitored to ensure they were at least as good as those of officers assigned to service headquarters staff.

The joint-duty variation of this career model goes further than just providing a mechanism for obtaining a certification needed to become a flag or general officer. It requires that significant numbers of officers assigned to critical joint positions be JSOs. In other words, joint certification (education plus experience) is more than a means of qualifying an officer for consideration to flag or general officer; it is also a prerequisite for assigning officers to the most important joint positions. The underlying assumption is that excellent performance in these positions requires a deeper understanding of joint matters.

The joint-duty variation of this career model could be extended to officers assigned to interagency or international positions, as well. For these officers, it would build on the identification, training, and management of officers as it does with joint officers. It would provide additional management of interagency and international officers by designating certain positions on the IIDAL as critical. Criteria would be needed for designating a position as "critical." A portion of these critical positions, say 50 percent, would require assignment of an IISO. Up to 25 percent of IISOs assigned to critical positions with Critical Occupational Specialties (COS) could receive credit for a full tour after 24 months. This variation of the career model would be feasible only if there are significant numbers of critical positions in interagency and international organizations that require officers with previous experience in these organizations. We discuss this in the next section.

This variation of the career model would work within the context of DOPMA. However, any additional requirements/constraints on the management of officers (e.g., interagency and international assignments as a prerequisite for

general officer) becomes increasingly difficult for the services to cope with. How does this fit with the existing joint duty variation of the career model? Many of these assignments are already on the JDAL. Others, not currently on the JDAL, could be added and the officers managed under joint duty (perhaps with a variation in the professional military education to focus on interagency and international positions). Such assignments might be considered as additional forms of joint duty and, thereby, simply might expand the positions considered under the current joint duty assignment list. This would be most applicable in the case of assignments to positions associated with multimilitary organizations (NATO or other treaty organizations, for example) or to the National Security Council.

Alternatively, an interagency and international career model might be considered as a separate variation—perhaps coequal to joint duty—whereby certification as an IISO would have the same standing as JSO certification as a characteristic of future flag and general officers. Either joint duty or interagency and international duty would count as a qualifying assignment.⁹ This would be feasible if these positions were considered as important as those related to joint duty. The amount of management required for this variation of the career model and the additional constraint on officer availability would be considerable.

Managing Competencies

No organization with a mission as diverse as the military can accomplish it effectively without major supporting activities. The career model described in this subsection develops and sustains the concentration of expertise in areas that are important to the overall operation of the organization. The officers assigned to these positions require generic capabilities that contribute directly to major specialized outcomes sought by the organization. As the capabilities (derived from expertise, functional competencies, and specific professional disciplines) come to be viewed as having a greater effect on major specialized organizational outcomes, they become key resources of the organization. Examples of positions requiring such capabilities include medical and spiritual health and weapons development and procurement. We label this career model “managing competencies.”

⁹Another alternative, in which officers would have to serve in *both* a joint and an interagency/international assignment, is inherently infeasible at the present time because of the small number of interagency/international positions relative to the population that would need to qualify. It deserves investigation at a later point as a logical consequence of strictly applying the leadership model to interagency and international assignments. For our study, we kept joint duty assignments preeminent and evaluated interagency/international assignments as integrated with the JDAL or separate from it but with comparable joint duty credit.

Primary Focus and Key Human Resource Practices

The primary focus of this career model is the development and intensive utilization of specialized competencies. Although tied by tradition and evolution to the core career model, the career model for managing competencies operates as a separate entity, often as a separate competitive category. It is a closed-track career model; officers who enter it stay in it.

Positions managed by this career model also tend to be separate organizational entities composed of members of the group being managed. For example, health professionals (although, at times, assigned to staff positions in operational units) are typically organized functionally in a medical treatment facility or clinic; judge advocates and acquisition officers are also organized functionally. Positions managed by other career models tend to be integral parts of the structure of the organization to which the officers are assigned—organizations that exist apart from a particular career model.

Education, particularly for entry into a profession or career field, and repeated assignments are important factors in this career model. The role becomes less important—particularly a role of leadership that cuts across many disciplines—in making contribution to organizational outcomes. Consequently, development is largely pursued through practice of the competencies, professional activities, conferences, periodic certification, and advanced education.

Professional military education is provided to a small portion of the group managed by this career model; it is considered a secondary developmental component except for potential senior leaders (for whom there are relatively few positions). The capabilities of the officers derive from the competencies they initially acquire through education and from the development and employment of those competencies as the officer pursues a career. This career model reflects a continually growing emphasis on depth or expertise in the officers managed.

DOPMA allows the services to designate separate competitive categories, and the services employ, to varying degrees, a career model that focuses on identifying, training, and managing officers in a specific career field. However, the career model for managing competencies differs from other career models besides simply isolating the management of its members from the rest of the officer corps.

Because of its original relationship to the core career model, progression through the grades under the managing competencies model remains a primary means of rewarding performance. But levels of competencies and the ability to employ those competencies (and, consequently, to affect outcomes) are often less related

to position in the organization than they are in the core career model. For example, the capabilities of health professionals are substantially developed when the career model first covers them. Although they need to learn to apply their competencies in a military environment, their learning curve is relatively steep and reaches a plateau rapidly, after which capability rises more slowly. In addition, because officers managed by this career model tend to be organized as separate functional entities in which a flatter structure is often more effective, promotion is not always as useful a practice for moving these officers through a career.

The consequences are twofold. First, where education (or experience) beyond the baccalaureate level is required for the development of the competency, officers enter active duty at a higher grade.¹⁰ Second, special pays become an important consideration in recognizing the value of the capabilities to the organization.¹¹ In part as a result of the higher cost of these resources to the organization, employing these officers almost exclusively in positions that use their competencies produces more value to the organization than providing a series of increasingly responsible positions through promotion. Although general leadership capabilities are necessary in these organizations, they are not the focus of a career model for managing competencies—as it is in the career models for managing generalists or leader succession.

This career model has been applied most frequently to the professions (e.g., health professionals, chaplains, and lawyers); however, the Army is currently implementing this type of career model for aggregations of officers who possess many similar characteristics yet are not organized around a specific profession. The acquisition community is also managed using a variation of this career model. In both the Army aggregate career fields and the acquisition career field, the career model starts to apply to a group of officers after they have completed about a decade of service. In the case of the acquisition community and in the Army's evolving broad competitive categories, we suggest that the growing recognition that these functional areas have a direct effect on important, specialized organizational outcomes has brought about a search for ways to better develop and employ these resources effectively.

¹⁰As we describe below, experience in military operations serves as a prerequisite similar to advanced education for acquisition officers and the Army's aggregate career fields. These officers have achieved an advanced grade through their service before the career model for managing competencies is applied to them. In these cases, a key component of the capability (other than its generic aspects) is military experience, rather than advanced education per se.

¹¹Although special pays are often justified on the basis of recruiting and retention, in the case of officers with generic capabilities, the special pays reflect a sense that the military organization values these capabilities in the same way as the market does.

Application to Officers Assigned to Interagency and International Positions

Under this model, officers to be assigned to interagency and international positions would be identified and selected for development and intensive utilization of their specialized competencies. Although this could occur upon entry onto active duty—as with health professionals, lawyers, and chaplains—we found no evidence to support such a requirement for officers to be assigned to interagency or international organizations. There appear to be no entry-level positions. Consequently, within this career model identification and selection would occur later in an officer's career.

Officers to be assigned to interagency and international positions would serve initially in a broader category, usually the line. To this extent, the career model would be tailored along the lines of its application to acquisition officers or officers in the aggregate career fields of the Army's revised officer personnel management system. At specific points in the officer life cycle, based on previous experiences and education, needs of the service, and individual desires, officers would enter the interagency and international career field. The career model could require some experience with an interagency or international organization and completion of relevant education as a prerequisite. This is the case, for example, for entry into the acquisition career field.

Under this career model, officers assigned to interagency and international positions would be managed as a separate community. Most importantly, they would compete among themselves for promotion.¹² The career field would be structured to provide for progression at least to the grade of colonel/captain with a promotion opportunity similar to that afforded other competitive categories. To ensure that the career field attracts and retains the highest-performing officers, the structure should include interagency and international positions at the flag and general officer level. The assignments would be primarily to interagency and international organizations and to positions within the service, the Office of the Secretary of Defense, the Joint Staff, or defense agencies that deal on a regular basis with interagency and international policies or operations.

A career model for managing competencies is feasible and works within the structure of the existing officer career models today. This model would be

¹²Within a career model for managing competencies, some officers are managed within a separate competitive category and some are not.

feasible only if the number of officers engaged were large enough to support its own structure. We analyze this in the next section.

Managing Skills

The services also rely on officers who operate key organizational systems and processes or who provide key support services. The career model described in this subsection develops and sustains expertise needed for effective operation of these systems, processes, and services. The officers assigned to these positions require generic capabilities that contribute to important, but common, outcomes. These capabilities are reflected in the specialists of the organization. Examples of positions requiring such capabilities include finance, operations research, and information technology. As noted above, the Army has grouped together broad categories of officers performing such activities and established a separate competitive category. Prior to this action, the Army managed many of the officers in categories known as functional areas. The Navy has used specialized competitive categories such as oceanography, civil engineer, and supply for a number of years. The Air Force and Marine Corps make more limited use of competitive categories. We label this career model "managing skills."

Primary Focus and Key Human Resource Practices

The primary focus of this career model is the development of specialized capabilities. These capabilities are identifiable and can be acquired through training and education. However, they generally do not rise to the level of importance of a competency manifest in a profession (i.e., certain characteristics including a body of knowledge that requires lengthy education and deep experience).

Although officers receive education to carry out the particular activities under this career model, they continue to be managed along with officer generalist, unlike those under a competencies career model. Also unlike those under a competencies career model, they may be assigned to the same kinds of positions as officer generalists (though "command" is less likely). As a result of repeated assignments to their functional area and the lack of command opportunities, these officers lack the kinds of experience possessed by their contemporaries who are fully under a leader succession career model. As a result, a major feature of this career model is in the form of "protection." Without internal controls (for example, guidance to promotion boards or floors on the number promoted), these officers would be significantly disadvantaged. In fact, it is a career in which

an officer can accomplish a great deal but is extremely unlikely to reach the highest levels of leadership.

Again, because of the origin of the generalist career model, managing officers as specialists is more restrictive than it might otherwise be. Many of the positions to which these officers are assigned have important impacts on the overall operation of the organization; in fact, officers are often sent to civilian universities for advanced degrees and assigned to key positions in organizations operating major systems, processes, or support services. However, their expertise is also often lost before being fully utilized because the promotion system does not have a means of assessing their value vis-à-vis officer generalists with a more direct link to the primary organizational outcome.

Application to Officers Assigned to Interagency and International Positions

Officers assigned to interagency and international positions could be placed in a career model for managing skills. They would receive training through advanced civilian education in international affairs, or assignments with the United Nations, NGOs, or similar agencies. Using the model of foreign area officers, the training could be accomplished through Department of Defense schools, providing a more tailored curriculum. Repeated assignments to interagency and international organizations would be the norm, but officers would often interleave such assignments with more traditional, but non-key, service assignments. In this career model, officers would not remain competitive without promotion protection. As a result, officers would need to be protected in the promotion process.

Summary of Career Models

We have identified four career models, all variations of the generalist career model, that could be applied to officers assigned to interagency and international positions. The four variations are all feasible in the sense that they have been shown, in practice, to work effectively in managing officers. They are also all feasible in the sense that they can operate together in managing the officer corps as a whole. Officers currently assigned to interagency and international positions tend now to be managed under either the leader succession or exceptions career model. In Section 4, we analyze the feasibility of the four career models in terms of their ability to manage officers assigned to interagency and international positions based on the number and characteristic of those positions. In other words, we determine if the career models produce viable career tracks. We will

demonstrate that all the models are feasible, although they operate in different ways and with different results.

In Section 5, we turn to advisability. We will assess the advisability of managing officers under each of four distinct career models from three perspectives: officers assigned to interagency and international positions, the services from which they come, and the organizations that use these officers. We will then draw conclusions about which models are improvements and which, if any, are best, and make observations.

4. Feasibility of Career Models

This section addresses the feasibility of each career model for officers assigned to interagency and international positions. Our conclusions derive from a system dynamics model that simulates the steady-state flow of officers in terms of their selection, assignment, education, promotion, and separation. This model represents these processes in sufficient detail to enable assessments of feasibility. This section interprets model results in a manner useful for career managers and policymakers. The detailed model results that support this discussion and which are of interest to analysts are found in Appendices C, D, and E.

This discussion builds on the conclusion of the previous section that each career model is feasible in the sense that it has been shown—in practice—to work effectively in managing officers generally. We used the system dynamics model to ascertain the details of selection, assignment, promotion, and education needed to sustain a viable career track for officers assigned to interagency and international positions. The viability of the career tracks is shown to depend upon several factors: the total number of interagency and international positions, the distribution of these positions among the services, and the number and proportion of these positions at each grade.

This feasibility assessment builds upon the distribution of positions as reflected in Tables 2.1 and 2.2. In addition to the distribution by service and grade, officers are also distributed by year group. For example, Air Force officers at the grade of O-4 are spread into six different year groups. Losses from service occur throughout the year-group distribution; promotion rates and thus promotion outflow are applied only to the last year for the group. Assignments last for three years. Because the Army and the Air Force have the majority of interagency and international positions, and because the distribution of grades serving in these positions is significantly different for each service, the following discussion explores the implications of each career model by service where appropriate. Also where appropriate, we evaluated the implications of each career model for officers assigned to the smaller category of interagency and international positions at the national policy level and then for officers assigned to the larger category of positions at the operational and tactical (as well as policy) level.

Table 4.1 provides a summary of the implications on the key operational parameters inherent in each of the career models discussed earlier. These characteristics were used as the basis for inputs to the flow model.

Table 4.1
Basis for Input to Career Models

	Selection for Professional Military Education	Promotion Selection	Continuation	Assignment to Interagency/ International Positions
Managing the generalist	Average	DOPMA policy	Average	One-time
Managing the exception	Lower	Lower	Lower	One-time
Managing leader succession	Higher	Higher	Higher	Periodic
Managing competencies	Lower	Determined by position structure	Average	Continuous
Managing skills	Lower	Lower	Average	Periodic

Using these inputs and the distribution of interagency and international positions, our model simulates the flow of officers from the point of selection to the grade of O-4 through the grade of O-6. It calculates the number of officers who enter the career model as O-4s and the number of lateral entries required at the grades of O-5 and O-6 to fill the available interagency and international positions. It also provides insight into the characteristics of officers governed by each career model, such as the depth and currency of interagency and international experience, quality of within-service experience, and depth of knowledge of the interagency and international community.

The career model for managing the generalist serves as the basis for developing model parameters for the other career models. It was not explicitly modeled; rather, we used current experience under DOPMA as the point of comparison. Officers managed under this career model have an average likelihood of being selected for educational opportunities, such as senior service school. They are promoted at the established DOPMA rates, and they continue in service at an average rate. These officers would not serve repetitive assignments in the interagency and international community. We used 1997 rates as contained in official reports and data as a starting point and varied them for each career model. The details are in Appendices C through E.

Managing the Exception

The career model for managing the exception would assign officers to interagency and international assignments if they were available and in the absence of specific individual requests for them from other organizations. This career model was not modeled directly because the erratic and unpredictable nature of the assignment policies preclude the steady-state condition required to use a system dynamics model. Thus, the discussion of this model is limited to the earlier descriptions and some assumed outcomes described later in this section.

Managing Leader Succession

In this section, we summarize the feasibility of a career model for managing leader succession. In a perfect implementation, an officer would serve in a single interagency and international assignment in the grade of O-4 or O-5 and might return to a prestigious interagency and international assignment at the grade of O-6 prior to selection for flag rank. To evaluate this, we start with an assessment of the effect on officers assigned to the 330 national policy level positions allocated to services and grades as shown in Table 2.1. We then expand the application to a larger list that includes an additional 1,200 positions involved in operational and tactical positions (Table 2.2), as well. Finally, we summarize the key findings.¹

Policy Level Positions

Implicit in this career model is an assumption that all interagency and international assignments are filled with officers likely to be competitive for flag rank. Consequently, our model specifies that all officers who would serve in these assignments in the grade of O-4 would have been selected for intermediate service school in residence. After school, most officers would serve in two assignments before selection to the next grade. Our model specifies that very few, if any, officers would serve two interagency and international assignments at this grade because there are few such positions at the policy level at the grade of O-4 for any of the services (i.e., spread across six year-groups). Most positions at all grade levels would be filled with officers without interagency and international experience because there are few qualifying positions. For example, there are

¹The limited scope of this project precluded detailed modeling for all four services. Because the Army and Air Force account for 74 percent of the officers assigned to policy-level interagency and international positions and 68 percent of the larger number of international and interagency positions (see Tables 2.1 and 2.2), this modeling focused on those two services.

only approximately 12 Army and 34 Air Force officers serving in O-4 interagency and international assignments at any one time. Thus, a peer group of only about two or three Army officers and seven Air Force officers with interagency and international experience reach the O-5 promotion window each year.

Promotion rates are based on the current reported promotion rates for line officers (Table 4.2), but the system dynamics model varies those rates depending on the assignment history of each individual—in particular, the number of interagency and international assignments they have had. The model promotes officers who served in a single interagency and international assignment at a rate 10 percent higher than the generalist board average, whereas it promotes those few officers who served in two interagency and international assignments at the board average for their due-course counterparts. In other words, our model reflects the assumption that the latter officers, though previously recognized as high-quality, risk being perceived as having spent too much time away from more-valued assignments in the service to be as competitive in the leader succession model.

The Army and Air Force promotion rates to the grade of O-5 embedded in our model are shown in Table 4.3. Applying these rates to the pool of eligible officers with interagency and international (I&I) experience, our model estimates that one to two Army officers and approximately five Air Force officers would be promoted to the grade of O-5 annually.² These officers would be promoted at a relatively high rate; the low number of officers with experience promoted is a product of the relatively few interagency and international positions at the grade of O-4 through which officers could gain that experience.

Table 4.2
Reported Promotion Rates for Line Officers (in zone, %)

To Grade	Army	Navy	Air Force	Marine Corps
O-5	59.9	64.5	63.0	68.2
O-6	41.2	47.3	41.9	42.4
O-7	2.5	2.8	2.2	2.8

²There are two ways to count officers in system dynamics models: as stocks, or total numbers; and as peer groups. The total number of officers serving in interagency and international assignments at the grade of O-4 was stated as thirty-four. Five Air Force officers will be promoted, but this should not be considered as five out of thirty-four. Instead, this is five of the officers who are up for promotion, or five of approximately seven officers in the same peer group.

Table 4.3
Promotion Rates to O-5 (Army and Air Force),
"Managing Leader Succession" Model

Number of O-4 I&I Assignments	Basis of Rate	Army Rate (%)	Air Force Rate (%)
1	110% of generalist rate	65.89	69.3
2	Generalist rate	59.90	63.0
0	110% of generalist rate	65.89	69.3

Our model reflects the policy that a majority of those few O-5s with interagency and international experience at the grade of O-4 would not serve again at the grade of O-5. This policy decreases the likelihood that the interagency and international community would benefit from officers with prior experience serving in O-5 positions. However, it increases the number of officers with interagency and international experience who would be candidates for the more important positions open to officers at the grade of O-6 and who could become IISOs. Additionally, this policy holds down the number of out-of-service assignments for any one officer. Thus, officers with no experience in the interagency and international community would fill the majority of O-5 interagency and international positions. As a result, in any year-group of O-5s reaching the O-6 promotion window, about 15 Army and 25 Air Force officers would have served in a single interagency and international assignment during the grade of O-5. Only about two from each year-group would have had two such assignments. From a different perspective, only about seven Army and nine Air Force interagency and international O-5 positions could be filled with an officer with interagency and international experience.

Once again, our model reflects the assumption that the vast majority of O-5s who served in interagency and international positions would be selected for senior service school and promoted to the grade of O-6. It also reflects the assumption that officers who have served in two interagency and international positions at the grade of O-5 would rarely be selected for senior service school. Our model estimates that each year, approximately 15 Army and 27 Air Force officers with interagency and international experience would be selected for senior service school and then promoted to O-6.

Our model reflects a policy that more officers would be assigned to dual interagency and international assignments (one after the other) at the grade of O-6 because of by-name requests from a senior decisionmaker. However, at any one time, there would be 84 Army and 63 Air Force officers with prior interagency and international experience available to serve in 47 Army and 43

Air Force interagency and international positions at the grade of O-6. While a relatively low ratio, this represents only those officers with prior interagency and international experience; other officers without such experience would also be assigned to interagency and international positions. In total, our model estimates that, each year, approximately 14 Army and 10 Air Force officers with one or more interagency and international assignments would arrive at the promotion window to grade O-7.

Sensitivity Analysis—Greater Number of Interagency and International Positions

We considered next the feasibility of the career model for managing leader succession when applied to the officers assigned to the larger group of some 1500 interagency and international positions at the operational and tactical, as well as policy, level.³ The distribution by grade and service of the list of the larger number of interagency and international positions discussed in Section 2 is dramatically different from that of the list of the smaller number of positions. The positions in the larger list are spread among the grades in a more traditional profile, with the largest portion of the positions at the grade of O-4 and the smallest portion at the grade of O-6. Managing assignments to these positions would require considerably more effort. The implications of the increased number of positions for a career model that manages leader succession follow.

Given almost 200 interagency and international positions at the grade of O-4, approximately 70 officers would have to be assigned to a single interagency and international assignment each year. Additionally, another three or four officers would probably serve in two successive interagency and international assignments at the grade of O-4. Our model continues to reflect the assumption that officers who served in a single interagency and international assignment would be promoted at a rate higher than the generalist average, which is typical for this career model. As a result, approximately 48 of the officers promoted to O-5 each year would have interagency and international experience. However, given the large number of interagency and international positions at the grade of O-5, the majority of officers filling these positions would not have prior

³This larger list does not suggest more officer positions. All of these positions currently exist and are filled with officers by the military services under the provisions of DoD Directive 1315.7 (1997). However, to the degree that these positions provide developmental opportunities and/or are critical to the conduct of interagency and international operations, they could be considered part of the demand for officers to be managed under a different set of rules for a particular career model much as CJCSM 1600.01 (1998) governs positions on the Joint Duty Assignment List. We are assessing the impact of managing officers in new ways for different career models through existing military positions.

interagency and international experience. Once again, our model assumes that those officers who have garnered a moderate amount of interagency and international experience would do very well in promotions.

Because of the greater proportion of interagency and international positions at the O-4 and O-5 grades, it would be easier to assign officers with prior experience to interagency and international positions at the grade of O-6. Approximately 530 Army and 550 Air Force officers with prior interagency and international experience would be available at the grade of O-6 to fill only 105 Army and 135 Air Force positions, respectively. This would provide a much better assignment ratio and would permit a greater percentage of O-6 interagency and international positions to be filled with experienced officers.

Summary of Key Aspects

The overwhelming majority of officers serving in interagency and international assignments at the grades of O-4 and O-5 would have no previous experience. Officers with prior experience could fill a much larger percentage of O-6 positions. However, because a relatively large share of the positions are at the grade of O-6, only a small percentage of these could require prior interagency and international experience without stressing the services' assignment processes, which are trying to assign such officers to key service positions.

Our model reflects the assumption that officers who serve in interagency and international assignments under a career model for managing leader succession would be promoted above the generalist average, unless they serve in multiple interagency and international assignments within a single grade. These latter officers would be promoted at or below the average for their year-group. The existing distribution of interagency and international positions by grade would allow the vast majority of officers to serve a single tour in the grades of O-4 and O-5, thereby benefiting from these higher promotion opportunities. In turn, because they would have excellent opportunities for advancement, these officers are also assumed to have relatively high retention rates.

Thus, while feasible in the sense that it provides a viable career track for the officers it governs, this career model exhibits inherent conflicts. First, the more officers who serve in multiple interagency and international assignments at any one grade (capturing the benefit of experience), the fewer the number of officers who would have prior interagency and international experience at the next grade. This is true both because those officers who spend more assignments out of the service would be promoted at average rates (and thus fewer advance) and because of simple mathematics. If an officer fills more than one interagency and

international assignment as an O-4, then some other officer is deprived of the opportunity to gain that experience.

Second, this career model is less likely to be successful as the number of officers increases because of the stress that higher promotion advancement (or protections) for this group would place on overall service promotion rates.⁴ To the extent that the positions labeled interagency and international are on the JDAL, a career model for managing leader succession currently governs these officers, and they already benefit from some promotion advantages or protections. However, to the extent that the list of interagency and international positions grows larger and does not overlap considerably with the JDAL, then the higher promotion rates (protections) may become burdensome to the services.

Managing Competencies

This career model assumes the existence of a separate cadre, similar to the acquisition corps, into which officers flow and within which they stay for the remainder of their careers. Such officers would be managed separately from other officers in the service. As with the other models, the success of a career model for managing competencies depends upon the distribution of positions by grade. The emphasis of this career model is depth of interagency and international experience. In a perfect implementation, an officer would enter this career model at the grade of O-4, and most would retire at the grade of O-6. For the smaller group of 330 national policy-level interagency and international positions, this career model is feasible but not as a perfect implementation. Instead, some number of officers would enter this career model laterally at the grade of O-5 for all of the services, and at the grade of O-6 for two of the services. Thus, not all the officers under this career model have the depth of expertise in interagency and international issues that a career model for managing competencies seeks to develop.

The following discussion explains the effects of the career model in more depth. As previously, we begin with the smaller list of positions and discuss implications of the larger list afterwards.

⁴DOPMA grade tables place a ceiling on the absolute number of officers in certain grades.

Policy Level Positions

Officers would be selected into this career model as they are promoted to the grade of O-4. Most would attend an intermediate service school and then progress to their first interagency and international assignment. Our model specifies that, on average, they would be assigned to two interagency and international assignments at each grade and spend about six years in a grade before promotion to the next grade. Our model uses designed promotion opportunities for this career model that are consistent with those currently reported for each of the services' acquisition communities, which are also closed communities. These promotion rates are shown in Table 4.4.

Under a career model for managing competencies, we assume officers would leave the service at approximately the current rate at which the overall population of officers leaves the service. Given these promotion and loss behaviors and the distribution of interagency and international positions by grade, the effects of the career model for each of the services are described below.

Army. Our model estimates that about three Army officers would be selected within every two-year period at the grade of O-4 for the seven available Army O-4 positions.⁵ Each year, one of these seven would be promoted to O-5 and continue to be assigned to interagency and international positions; another seven O-5s without interagency and international experience would be assigned to interagency and international O-5 positions and come to be governed by the career model. Fifty Army O-5s would be required to fill the designated interagency and international positions at that grade. Of these officers, two to three would be promoted to O-6 annually, and another four Army officers would enter the career model laterally as O-6s.

Air Force. Our model estimates that approximately four Air Force officers would be selected each year to enter this career model to fill the 19 positions available at the grade of O-4. Of these officers, about two would be promoted annually to the

Table 4.4
Promotion Rates, "Managing Competencies" Model (%)

To Grade	Army	Air Force	Navy	Marine Corps
O-5	62.5	68.9	72.6	73.9
O-6	31.7	32.1	56.2	35.7

⁵Selection occurs annually with a modeling estimation of 1.5 officers selected each year.

grade of O-5. Eleven officers without interagency and international experience would be selected annually to enter this career track as O-5s in order to fill the required 78 O-5 positions. Each year, only four O-5s would be selected for promotion to O-6 and another three officers would enter laterally at the grade of O-6 to fill the required 43 interagency and international positions for Air Force O-6s.

Navy. Our model estimates that only one Navy officer would be selected each year at the grade of O-4, and these officers would frequently be promoted to O-5. Another six Navy O-5s without interagency and international experience would enter the career model annually. Three-fourths of the officers who serve in interagency and international positions at the grade of O-5 would be promoted to O-6, and no lateral entries would be needed at the grade of O-6.

Marine Corps. The Marine Corps has the responsibility for only a few interagency and international positions, so it is more difficult to estimate annual occurrences. However, if consistent with the other services, it would select an O-4 for this career model approximately every two years, and there would be two O-4s serving in interagency and international assignments. It would select one or two O-5s without interagency and international experience for lateral entry to this career model, in order to fill ten total O-5 assignments. Like the Navy, the Marine Corps would not need to select officers at the grade of O-6 for lateral entry to this career model. However, because of the very small number of O-6 positions, it would have to either promote O-5s at a slightly lower rate or utilize officers with interagency and international experience (but with little experience in assignments inside the service) in other kinds of positions.

Sensitivity Analysis—Greater Number of Interagency and International Positions

Including the operational and tactical levels increases the number and percentage of interagency and international positions at the grade of O-4. This would reduce substantially the requirement for lateral entry at more-senior grades but would not eliminate it. For example, for all the services, the majority of officers serving at the grade of O-5 would be promoted from within. For the grade of O-6, however, the Air Force and the Army would still need to fill about half of the positions with lateral entries. On the other hand, the Marine Corps would have to decrease the promotion rate to the grade of O-6 for interagency and international officers slightly or utilize officers with interagency and international experience in other kinds of positions. Similarly, the Navy would have to decrease the promotion rate to the grade of O-6 for interagency and

international officers considerably (from 56 percent to 38 percent) to avoid utilizing officers with interagency and international experience (but little experience in assignments inside the Navy) in other kinds of positions.

Summary of Key Aspects

Because of the distribution by grades for positions at both the policy level and the operational and tactical levels, many O-5 and O-6 positions would be filled by officers with little, if any, interagency and international experience. For example, the majority of officers at the grade of O-5 serving in interagency and international assignments would have obtained no interagency and international experience as O-4s. For the Army and the Air Force—which have the bulk of the assignments—only about half of the O-6s would have served in interagency and international assignments at the grade of O-5. On the other hand, because most officers serve in two interagency and international assignments within a grade, half of the officers at any one grade have some prior interagency and international experience at that grade.

We concluded that a career model for managing competencies is feasible in terms of providing a viable career track for officers it governs, although at the more-senior grades these officers could have lower promotion opportunities than officers outside the interagency and international community. However, based on the magnitude of lateral entry required, it would fall somewhat short of achieving its primary intent: to develop and fully utilize the depth of knowledge that officers bring to successive interagency and international assignments. In addition, because the distribution of positions causes the career model to create too many officers with interagency and international experience at the grade of O-6, many of these officers would be assigned to other service positions. However, given their limited assignment history within their own service, these officers would have less breadth of knowledge of service issues,⁶ and, as a result, may not be as well prepared as they might otherwise be to serve in those positions.

Our evaluation led to two other observations. First, if promotion opportunity to O-5 for this career model were increased, it would benefit the interagency and international community by decreasing the number of lateral entries required to

⁶Not needed to the same degree if they remained in the interagency and international community.

fill positions, and thus further increase the depth of interagency and international experience of the officers assigned to these positions.⁷

Second, given that a relatively large number of these policy level positions are already included on the JDAL, some of these may be assignments necessary to be eligible for promotion to general or flag officer given the current implementation of Goldwater-Nichols. By including these assignments within a closed-track career model, many officers outside the interagency and international community may be excluded from assignments necessary for their career advancement. This is even more of a problem if the operational and tactical interagency and international positions are included.

This career model would work best for the distributions of positions for the Navy and the Marine Corps. Such a distribution would limit the need for lateral entry, would enable officers who enter the career model early to have good promotion opportunities, and would permit officers to develop the most interagency and international depth.

Managing Skills

The structure we used to represent this career model resembles, in part, the one we used to represent the career model for managing leader succession. Our model assigns officers to interagency and international assignments as part of a regular career path, and it would allow them to serve both in an interagency and international and in a regular service assignment while in any grade.⁸ The difference in the way we modeled the two is based on the relative importance imputed to interagency and international assignments and the effect of the relative importance on key assumptions reflected in our model.

For example, our model for managing leader succession reflects the policy that interagency and international assignments at the grade of O-4 would be filled by officers in the top half of their peer group. In addition, most officers who served in interagency and international assignments would be promoted at a rate higher than their peers.

⁷However, this would likely meet with resistance from the larger service community due to the perceived impact on officers outside this career model (i.e., promotion is a zero sum game because of the grade table), especially those under career models for managing leader succession.

⁸The difference between a career model for managing skills and one for managing the exception is in the amount of education and experience in a knowledge domain needed by the officer. Officers under a career model for managing the exception need only to have the broad characteristics of an officer.

Our model for managing skills reflects the policy that *all* officers would be eligible for assignment to interagency and international positions at the grade of O-4. In addition, officers who serve a single interagency and international assignment at that grade would be promoted slightly below the generalist rate; officers who serve multiple interagency and international assignments at the grade of O-4 would be promoted at a still lower rate, as shown in Table 4.5.⁹

Our model reflects the assumption that officers who serve in interagency and international assignments at the grade of O-5 would be less likely to be selected for senior service school and for promotion to O-6 than would their mainstream peers. In addition, those who served in multiple interagency and international assignments would have an even greater reduction in promotion opportunity. The following analysis provides a more-detailed discussion of the implications for the Army and the Air Force.¹⁰

Table 4.5
Promotion Rates to O-5 (Army and Air Force),
"Managing Skills" Model

Number of O-4 I&I Assignments	Basis of Rate	Army Rate (%)	Air Force Rate (%)
1	90% of generalist rate	53.91	56.7
2	80% of generalist rate	47.92	50.4
0	Generalist rate	59.90	63.0

Policy Level Positions

For the policy level positions, our system dynamics model estimates that a career model for managing skills would result in approximately 13 Army officers and 36 Air Force officers in a year-group who would serve in an interagency and international assignment while in the grade of O-4. On average, only one Army and four Air Force officers with interagency and international experience would be promoted to the grade of O-5 annually.

⁹Even though these officers might be in JDAL positions with promotion protection, other officers in protected positions would be promoted at higher rates to achieve desired averages.

¹⁰Like that conducted for managing leader succession, this modeling included only the Army and the Air Force, which together represent the majority of officers assigned to interagency and international positions.

Because few officers with interagency and international experience would be promoted to O-5 each year, the majority of interagency and international assignments at the grade of O-5 would need to be filled by officers without previous experience. For example, our model estimates that, on average, officers without interagency and international experience would fill 49 of the 50 required Army positions and 74 of the 78 required Air Force positions at the grade of O-5. In any given year, our model estimates that about eight Army officers and ten Air Force officers with interagency and international experience would be promoted to the grade of O-6. The majority of these officers will serve in a single interagency and international position at the grade of O-6. A small number will serve in two interagency and international positions and a small number will not serve in interagency and international assignments at the grade of O-6. Thus, given that there are 47 Army and 43 Air Force interagency and international positions at the grade of O-6, approximately one-half of the Army and one-third of the Air Force positions would be filled by officers without prior interagency and international experience. Few, if any, of these officers would be promoted to general/flag officer rank.

Sensitivity Analysis—Greater Number of Interagency and International Positions

Including operational and tactical positions in our analysis has implications for a career model for managing skills, as well. As was the case for a career model for managing leader succession, the larger number of positions available at the grade of O-4 would provide a larger number of officers with interagency and international experience at the promotion window to O-5. However, officers with interagency and international experience would not fare as well under a career model for managing skills as they would under a career model for managing leader succession. Because of the lower rate of promotion and of selection to the senior service school reflected in our model, there would actually be fewer officers with prior O-4 experience at the higher grades.

Our system dynamics model estimates that approximately 40 officers with interagency and international experience would be promoted to O-5 in both the Army and the Air Force. Fewer than half of these would serve in interagency and international assignments at the grade of O-5, and each year 54 Army and 58 Air Force officers at the grade of O-5 without interagency and international experience would be assigned to their first interagency and international position. Of the 179 Army and 189 Air Force interagency and international positions, only 38 from each service would be filled by officers who had served in interagency and international assignments at the grade of O-4.

Our model estimates that, on average, eight officers from each service would be selected to the senior service school each year, despite having served in an interagency and international assignment at the grades of both O-4 and O-5. Another 33 or 34 officers with one interagency and international assignment in their past would be selected from each service. Officers without interagency and international experience would fill the large majority of the school seats (249 Army and 219 Air Force). Our model reflects the policy that promotions to O-6 would also follow this pattern. Given the increased proportion of O-4 and O-5 interagency and international positions compared with the proportion of O-6 positions, the Army could fill all O-6 interagency and international positions with officers possessing interagency and international experience. About 19 Air Force officers without prior interagency and international experience would be required to fill O-6 positions. None of the officers who have served in interagency and international assignments (particularly multiple assignments) during their career are likely to be promoted to general or flag officer, so the larger number of interagency and international assignments would negatively affect a larger number of officers.

Summary of Key Aspects

Because a career model for managing skills reduces advancement and continuation for officers who serve in interagency and international assignments, smaller numbers of officers with this experience are promoted to each successive grade. This treatment will complicate any attempt to develop a “cadre” of officers with interagency and international experience.

Feasibility Conclusions

The feasibility and attractiveness of the career models gained from our modeling effort can be assessed in several ways. One measure is the effect on the individuals governed by the career model, to include the likelihood of selection for educational opportunities or promotion. The estimates of these modeling inputs were summarized earlier in Table 4.1, and the implications are quantified throughout this section. The remaining measures address the impact of different career models on characteristics the officer brings to the interagency and international community—specifically, to the organizations to which these officers are assigned. These characteristics include

- breadth of interagency and international experience
- quality of service experience

- depth and currency of knowledge within the interagency and international community
- nature of the officers.

The breadth of interagency and international experience officers would possess under each career model is represented, in Table 4.6, by the estimated proportion of officers at each grade with prior interagency and international experience. It is evident from this table that it is very difficult for an officer assigned to an O-4 position to have prior interagency and international experience. Even under a career model for managing competencies, where officers serve only in interagency and international assignments for the rest of their career, half of the officers serving in interagency and international assignments would be in their first interagency and international position. The career models differ considerably in the amount of experience officers bring to O-5 positions, but three of the career models fill most of the O-6 level interagency and international positions with officers having interagency and international experience.

Table 4.6
Interagency and International Positions Filled by
Officers Who Possess Prior Interagency and
International Experience

Career Model	O-4	O-5	O-6
Managing leader succession	None	Few	Most
Managing competencies	Half	Most	Most/ all
Managing skills	None	Few	Most
Managing the exception	None	None	Few

Table 4.7 indicates the depth (length of education and/or experience) and currency of knowledge that officers would bring to interagency and international assignments at the different grades under the various career models. Although officers at the grade of O-6 have generally attended senior service school and thus have acquired some current knowledge through education, only the career model for managing competencies produces officers with deep interagency and international experience by the grade of O-6.

Table 4.8 describes the quality of service experience that officers under each of the various career models bring to the interagency and international community. The premise is that the interagency and international community has something

Table 4.7

Depth and Currency of Interagency and International Experience at Each Grade

Career Model	O-4	O-5	O-6
Managing leader succession	None	Low	Medium; current through education only
Managing competencies	Low	Medium	Deep; current through education and experience
Managing skills	None	Low	Medium; current through education only
Managing the exception	None	None	Low; current through education only

Table 4.8

Quality of Within-Service Experience

Career Model	O-4	O-5	O-6
Managing leader succession	High	High	High
Managing competencies	Low	Low	Low
Managing skills	Average	Average	Average
Managing the exception	Low	Low	Low

to gain from officers with such high-quality service experience as past assignments as operational commanders. Currently, based on position data, about 75 percent of officers going to these assignments now would have been on a leader succession track.

Finally, Table 4.9 characterizes the nature or type of officer who would serve in interagency and international assignments under each of the career models. Under a career model for managing the exception, officers who are available would be assigned to interagency and international assignments, and they may be—or may be perceived to be—of lower quality than average because they have not been selected for other opportunities. A career model for managing leader succession would provide officers with high likelihood of flag rank to the interagency and international community, and they would carry their experience in, and perspectives gained from, their interagency and international assignment back to the services, where they would continue to higher rank. A career model for managing competencies would develop officers who are experts in interagency and international issues. A career model for managing skills presents

Table 4.9
Nature of Officers Assigned to Interagency and International Positions

Career Model	Nature
Managing leader succession	Likely future flag
Managing competencies	Interagency and international expert
Managing skills	Typical service experience, but perceived lower quality
Managing the exception	Available

a conundrum: it would assign officers with typical service experiences to interagency and international assignments. However, because these officers are promoted at lower-than-average rates, they would be perceived to be of lesser quality.

In summary, all of the career models are feasible, but each provides a different experience for the officers assigned to interagency and international positions and assigns officers with different characteristics to the interagency and international community.

5. Advisability

In the previous sections, we described four career models (in addition to the generalist career model) that could be applied to officers assigned to interagency and international positions and demonstrated their feasibility. Given a set of feasible career models for a particular community, the next question is advisability. This section describes our approach, develops a set of criteria against which the different career models can be evaluated, applies the criteria, and offers general conclusions.

Approach

To a large extent, the advisability of using a career model depends on whose perspective is being used. During the course of the study, we found three primary perspectives being represented: the individual officer, the interagency or international organization to which an officer is assigned, and the officer's military service. In order to evaluate the advisability of a career model from each of these perspectives, we needed appropriate criteria.

A career model (or any personnel policy) is neither good nor bad in any absolute sense. It has advantages or disadvantages only in terms of what it is attempting to accomplish—in other words, the objectives it is designed to achieve. A career model is a means of identifying, training, and managing officers. Its advantages and disadvantages, its benefits and costs, are most appropriately assessed in the context of the objectives or ends sought by those affected by its operation. We focused on the ends that are important to those holding each of the three perspectives delineated above. The career models are one of the means that affect how well those ends can be accomplished. A career model elicits a benefit if it helps to achieve a stated objective or end and a cost if it hampers achievement. Different perspectives have different objectives. These objectives formed the criteria against which we assessed advisability.¹

¹We also considered including a broader perspective, one that might be reflected by the CINCs, the National Defense Panel, the Quadrennial Defense Review and/or the Congress. However, in terms of the objectives a career model should satisfy (the criteria we use to assess advisability), we found that members of these groups shared a common perspective primarily with members of user organizations. Although we assign each objective to one of three specific perspectives, we made these assignments with a view toward simplifying the analysis. Importantly, it is not the "group," regardless of what it is labeled, that is the focus of our analysis, but rather the objectives that members of the group believe a career model should strive toward. In other words, in this section, we evaluate the effect of the relative importance of various objectives a career model is intended to

Objectives were derived from interviews with OSD officials, service representatives, individuals in the organizations into which the officers are assigned, and others who have worked in interagency and international positions or with officers who have.² Those interviewed were not asked to specifically delineate the benefits and costs, but rather to provide observations as to what they saw as the effect of the career models on factors that were important to them. We inferred objectives from these observations, as well as from commonly voiced considerations, from previous RAND studies on career models in the military, and from our own experience.

For each perspective, we first characterize the major objectives and then delineate components of these objectives in order to be better able to assess the impact of the different career models on those objectives.

Objective-Based Criteria for Different Perspectives

Individual Officers

Individual officers strive to achieve a successful career. In the current culture, that means due-course promotion, or better, selection for key positions (for example, command), stability in terms of career expectations, and reduced uncertainty. To succeed, they seek training and career development that ensure they possess the capabilities to meet the needs of the positions to which they are assigned. They want an opportunity to contribute to a meaningful mission and to be part of a culture that exhibits values consistent with their own. They seek rewards commensurate with their performance. They want respect and to be treated with dignity. Officers increasingly are seeking a favorable work/life balance.

We believe the career model used can affect three objectives sought by individual officers: ability to contribute, security, and rewards. These objectives and their components are outlined below and described in greater detail in Appendix F.

- **Ability to Contribute.** Career models differ significantly in their effect on an officer's ability to contribute to an organization's mission. They differ in terms of the *amount of preparation* they provide to the officer; the *management resources* devoted to officer monitoring, guidance, and career counseling; and the *sense of membership* in a group that has a common mission.

accomplish, not the effect of the relative importance of the group to which the objectives are ascribed. Consequently, the objectives sought by the broader perspective are, in fact, taken into account in the analysis—though not as a separate perspective.

²This perspective was previously used in Thie, Harrell, et al., (1997).

- **Security.** A career model can influence the officer's sense of security primarily in terms of the *stability of a career field*, the *length of a career* and the *likelihood that an officer will be able to continue for the full length*. A *strong culture* and *high skill transferability* also increase the sense of security.
- **Rewards.** A career model can determine rewards—monetary or nonmonetary. Rewards may be in terms of *direct pay*, particularly special and incentive pays; any *deferential treatment* officers receive, for example, more attractive assignments; and the *respect* that comes from potentially greater visibility as an important component of the whole.

User Organizations

The user organizations are where the broad national security perspective is most pronounced. This perspective is reflected primarily in how the career models add value to the officers assigned to the organization—value that is needed to carry out the broad national security missions.³ In other words, these organizations are attempting to get the most-qualified individuals in order to carry out their respective missions most effectively. Three considerations are central to their assessment of career models: contribution to mission, ability to control resources, and cost. These three objectives and their components are outlined below and described in greater detail in Appendix F.

- **Contribution to Mission.** Simply put, it is the officers' unique characteristics and resulting capabilities that are sought by the organizations and its leaders. Several considerations help in assessing how well the career models satisfy the needs of the organization. Career models differ in terms of the amount of *standardization* the officers employ in carrying out their activities, the degree of *specialization* officers bring to the needs of the organization, the extent of *knowledge of military operations* possessed by the officer, and the officer's *ability to see the big picture*.
- **Ability to Control Resources.** Organizations that value a resource generally desire to control its nature and availability. Career models provide this opportunity to varying degrees in terms of the ability they afford the user organization to *monitor key variables* such as numbers, characteristics, or

³As noted in an earlier footnote, others besides the user organizations share the objectives of this perspective. For example, to the degree the services see the utility of the activities performed by officers assigned to interagency and international positions for carrying out service missions, their views would be reflected in this perspective. Similarly, to the degree that the Department of Defense (the broadest organizational entity that can be considered a user organization) focuses on the importance of establishing and maintaining relationships with nondefense departments and agencies, its views would be reflected in this perspective.

qualifications of officers available for assignment; and the user organization's ability to *influence change*, for example to respond to changing requirements or doctrine.

- **Cost.** Although there are some instances where an organization using military officers is required to reimburse the military department for the cost of the officers, that is not generally the case for officers assigned to interagency and international positions. However, different career models do impose other, nonfinancial costs on user organizations. These include *management resources* for monitoring performance, the use of *communication/coordination* effort to overcome organizational barriers often erected as a result of specialization, and efforts to ensure that officer activities are *aligned with the mission* of the user organization.

Military Services

The overriding objective of a military service is to be prepared to accomplish its specific mission. Its current officer career models are designed to support that end within existing resource constraints. Certainly, the services view the activities of officers assigned to interagency and international positions as important contribution to their ability to carry out their missions. In this perspective, however, we chose to emphasize those considerations that center on being a provider of the resources, leaving broader national security considerations in the user-organization perspective. Three considerations are central to the military services' assessment of career models (as the provider of the resources): contribution to service mission, ability to manage officer resources, and cost. These three objectives and their components are outlined below and described in greater detail in Appendix F.

- **Contribution to Service Mission.** Career models influence the contribution officers make to service mission through the *value of specialization* to the service needs, *availability* of the officer to meet service requirements, the *alignment of officer perspectives with service missions*, and *flexibility* to meet service needs.
- **Resource Management.** The services provide the systems and processes for managing officers. These reside primarily under the auspices of the personnel and training communities. Career models differ in terms of how much *control* the services have over the officer resources, the *ease of management* of these resources, and the *effectiveness of management efforts* to achieve the desired ends.

- **Cost.** The cost of managing and training officers lies with the military services. This is a necessary expense of doing business. However, different career models require different amounts of managerial and training resources. These include *management overhead*, *complexity* in terms of constraints the career model imposes on the operation of other career models, and *financial costs* such as training.

Application of the Framework

For each component of the objectives above, we performed a ranking of the career models. The assessment was made from the perspective of the category holding the objective. For example, "1" would indicate the career model that meets the objectives of the specific perspective to the greatest extent; "4" would indicate the career model that meets the objectives to the least extent. Our complete assessment of the objective components for each perspective is contained in Appendix G.

We had no opportunity within the scope of the project to obtain formal assessments of how the participants would prioritize the objectives; nor did we attempt to weight empirically the priorities of the different perspectives. Instead, we developed a spreadsheet tool with which to vary the priority of the objective components held by each of the perspectives, the priority of the objectives held by each of the perspectives, and the priority of the perspectives themselves. We used this spreadsheet model to draw some general conclusions about the advisability of the career models.⁴

We used equal weights as a baseline and then varied the weights to draw more-general conclusions. Table 5.1 summarizes the results for the case where the perspectives and all the objectives (and components) receive equal weight. (Appendix G provides the detail.) The entries in the table reflect the ranking of the alternative career models (a "1" is higher than a "4") for each of the perspectives.

On the basis of equal weights, our analysis suggests the following:

- Individual officers assigned to interagency and international positions would prefer a career model that managed competencies or leader succession. These models score high against all three objectives held by this perspective.

⁴Appendix G contains a brief description of the weighting methodology we employed.

Table 5.1
Assessing Career Models Against Perspectives

Perspective	Career Models			
	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Individual officer	2	1	3	4
User organization	1	2	4	3
Military service	4	3	2	1

- The user organization would prefer a career model that managed leader succession. This model scored high against the objective of contribution to mission and control of resources, but low against the cost objective.
- The military services would prefer a career model that managed skill or exception, although this overall preference seems slight and more as a result of being "the least of all evils." A greater emphasis on the objective of resource management would enhance the preference for a career model that managed competencies.
- Because both the individual officer and user organizations prefer a career model that managed leader succession or competencies, these two models are preferred overall—when all perspectives, objectives and components are weighted equally.

We also conducted a sensitivity analysis, varying the weights of the perspectives, the objectives within perspectives, and the components. The complete analyses are in Appendices H, I, and J and are summarized in Appendix K. Our sensitivity analysis suggests the following:

- Generally, we found that for user organizations and military services, specific weights could lead to a preference for each career model. For individual officers, however, no combinations of weights could lead to a preference for career models that manage skills or manage the exception.
- If there is a relatively low priority for the individual officer's perspective, and if equal priority is given to the perspectives of the user organization and the military services, no clear preferences exist. However, if the individual officer's perspective is given increasing weight while maintaining equal weights for the other perspectives, managing leader succession and managing competencies emerge as the preferred career models.

6. Conclusions and Observations

Conclusions

This study has focused on the feasibility and advisability of establishing a cadre of officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments. We investigated four variations of the general career model that governs the majority of officers today. Each variation exhibits a predominant focus: managing leader succession, managing competencies, managing skills, and managing the exception. These variations are manifested in the military services today—identifying, training, and managing officers whose capabilities require special consideration in order to maximize their potential contributions to organizational performance. We assessed the application of each of these career models to officers assigned to interagency and international positions.

We found that each of these career models is feasible in two senses. First, they have been shown to be feasible from the perspective of being compatible with existing military service human-resource management systems. Each model is used by each service to manage different categories of officers within the service. So all the career models are feasible, *prima facie*.

Second, we analyzed each career model in terms of its application to the specific category of officers who are assigned to interagency and international positions. In other words, we assessed the implications of each career model on the viability of the officer's career track. The implications varied, depending on the scope of the positions to be managed and the military service. However, each career model could be configured so as to ensure a viable career track.¹ So all the career models are feasible on the basis of particular application.

¹Training and education appear to need careful management. Because of the grade distribution, a large percentage of officers are filling positions in which they have no prior experience, so some form of professional military education prior to assignment seems important. However, the timing of this education presents some difficulties. It is unlikely that any additional training at either the intermediate service school or at the senior service college will positively impact the interagency and international community, given the timing of each. In other words, such a small percentage of interagency and international positions are filled by officers at the grade of O-4 that five to ten years will elapse between this training and the assignment of most officers to interagency and international billets. If the senior service colleges provide additional interagency and international curriculum, then the majority of officers filling interagency and international assignments will have served in the interagency and international community prior to receiving the education. On the other hand, if the

We conclude that, overall, each of the four career models is feasible in terms of establishing a cadre of officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments.

We next assessed the advisability of each career model. We did this by considering how well each career model achieves intended objectives. These objectives differ depending on whose perspective is being used. We considered three perspectives: that of the individual officer managed by the career model; that of the user organization to which the officer is assigned; and that of the military service to which the officer belongs. We hypothesized the objectives that each of these perspectives would want a career model to achieve; we further decomposed the objectives into components in terms of which the impact of each career model could be assessed. In addition, we employed a criterion-based, multiobjective approach, assessing the effect on advisability of varying the priorities of the different perspectives, objectives within the perspectives, and the components of each objective.

Recognizing that not all those who hold a particular perspective hold the same priorities for the underlying objectives a career model is intended to achieve, we evaluated the effect of varying priorities on preference for career models. Generally, we found that for user organizations and military services, specific priorities could lead to a preference for each of the four career models. For individual officers, however, no combinations of weights could lead to a preference for career models that manage skills or manage the exception.

When each perspective (and each objective and component) was given equal priority, managing competencies was the preferred career model followed by managing leader succession. Thus, the first preference is for managing officers in interagency/international billets similar to the way the acquisition workforce is managed. The second preference is to manage them in the same way as officers filling joint billets. This is the result of individual officers preferring a career model for managing competencies and of user organizations preferring a career model for managing leader succession. Under this prioritization, the military services prefer a career model for managing the exception. That is, the services would rather place interagency/international requirements on a lower priority level and fill them using any available (and presumably lesser-quality) officer. Although the individual officer's perspective should be taken into account, in

interagency and international assignments at the grade of O-6 are judged to be the most important, then this education opportunity may be most appropriate. An alternative solution may be a condensed training program provided to officers at the beginning of their first interagency and international assignment.

practice that perspective often receives less priority than the other perspectives. Considering only the perspectives of the user organization and the military services, a higher priority for the user organization perspective leads to managing leader succession as the preferred career model; a higher priority for the military service perspective leads to managing the exception. The leader succession model puts higher-quality officers in interagency/international billets, at the expense of in-service billets. The exception model puts lesser-quality officers in the interagency/international billets, allowing the services to retain more high-quality officers for their own needs. Clearly, there is a conflict of interest. If this conflict is not resolved by giving greater weight to either the user or the service perspective, no particular career model is preferred. In the absence of a decision about which of these two perspectives is more important, remaining with status quo career management practices seems most likely.

Overall, we conclude that each of the four career models considered can be considered feasible for establishing a cadre of officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments. We also conclude that advisability is in the eye of the beholder. Where one stands on the advisability of a particular career model depends largely on what objectives one holds important. Consequently, we make no recommendations regarding the "best" career model because we believe that such a recommendation has to do (or, at least, should have to do) with the nature of the work done by the group of officers and the value of that work to the organization. Specifically, what is the overall relative importance of these positions? How do they fit into the structure of national security? How do they relate to the outcomes that are important to national security? Depending on the answers, the ways in which officers who fill these positions are identified, trained, and managed will vary. We suggest that, to a large degree, the appropriate career model be determined by the answers to these kinds of questions.

As a start to addressing that broader issue, we offer some observations in the following subsection.

Observations

As we analyzed the applicability of career models to officers assigned to interagency and international positions, we observed striking parallels with the development of career models for the joint and acquisition communities. The framework presented above helped to present this history in a different light from that in which it is usually cast. More importantly, it brought to the surface

the fundamental consideration that we believe is, in the final analysis, the major determinant of the appropriate career model to be used for officers assigned to interagency and international positions.

The services—the organizational element that manages officers—resisted treating/managing the joint and acquisition communities as separate entities until they recognized the importance of these communities—to their service objectives as well as to national defense. The real argument through the lengthy debates leading up to the selection of a career model was not which career model was better (although the argument manifested itself in that form). The real argument, hidden largely from view, was focused on the value of those communities (joint and acquisition) to the overall organization, to national defense.

Initially, the services considered these positions to have little value in accomplishing the service mission (in fact, some argued they were a distraction from it). As a result, at that time, the services managed officers assigned to joint positions as exceptions and officers assigned to acquisition positions as specialists. In the case of joint positions, the services viewed them as positions that needed to be filled with generally operationally based officers, and they distributed that burden across the force—assigning, as some suggested, “less-competitive” officers to the position on an “as available” basis. In the case of acquisition positions, the services viewed them as positions that needed some degree of training and specialization, but officers who continued to contribute to those positions and became more expert in them lost value to their service and became noncompetitive.

The services selected, trained, and managed these officers primarily on the basis of how they viewed the value of the resource (for example, how much and how directly they contributed to the service mission and, more specifically, to the outcomes desired by the service). Congress, in both cases, viewed their value differently; that is what drove Congress to specify that they be managed differently. The value of the resource—in terms of its contribution to national defense—led to a search for a way to ensure the value was focused and captured. The career model followed, in each case, as a way to develop the needed capabilities.

Of course, this is just one aspect of the entire set of circumstances that led to the development of the career models that apply to joint and acquisition officers. However, the framework highlights one of the major factors in the decision. The

importance of the contribution of these communities (and its nature—military-specific or generic) determined the design of the career model.²

Of course, the framework is a conceptual construct. Nonetheless, it is valuable in suggesting appropriate career models depending on how a category of officers is viewed in terms of its role in, and value to, the organization. This fundamental issue seems to us to be the nub of the issue with regard to officers assigned to interagency and international positions. Some see the officer's role as military-specific and contributing directly to the most important specialized outcomes of the organization (managing leader succession). Others see it as military-specific and contributing only to the organization's common outcomes (managing the exception). Some might see it as a key resource (managing competencies); others, as a specialty (managing skills). Until the fundamental issue can be resolved, discussion of the feasibility and advisability of particular career models is unlikely to be compelling. Once it is resolved, the principal characteristics of a viable career model are pretty much determined.

As noted in the preceding section, we found no source of data that identified interagency and international positions. As a result, during the course of the interviews, it was not surprising that we observed widely varying views of the nature of these positions. Notwithstanding that the bulk of these positions are currently on the JDAL, the predominate perception (in terms of our framework) was that interagency and international positions are viewed today as positions requiring officers with some operational experience and that these positions contribute little to the service missions. This is consistent with the general sense we received, primarily from service representatives, that officers assigned to these positions should be managed as exceptions.

We see one of the advantages of the framework we have developed as focusing the discussion on the value of these positions to national defense in the future. If they are viewed as key operational positions, then they should be intensely managed for leader succession. If they are viewed as contributors to important, but common, outcomes requiring generic expertise, then they should be less intensely managed as a skill. If they are viewed as direct, substantial contributors

²The task force that created the Army's revised officer personnel management system traveled a ways down this path as well. They moved toward managing competencies because, as they put it, future Army needs require a "strong bench" in areas that support the operational career field. They saw, for example, that the capability to manage information resources is valuable to the Army if it is to be able to achieve its mission in the future. The capability became valued, and the career model followed. Without agreement that the capability is valuable, there would be little argument for going through the trauma associated with the change to the new system. In fact, those who resist the change are still really arguing about the importance of the capability.

to important specialized outcomes requiring generic expertise, then they should be intensely managed as a competency.

Determining the absolute importance of the capability was not within the scope of this project. Yet, unless the larger issue is forced to the surface, it will remain obscured—but it will certainly affect the assessment of the career models.

Appendix

A. Senate Armed Services Committee Report Language

The committee notes that the report of the Quadrennial Defense Review and the report of the National Defense Panel stress the importance of extending the concept of jointness beyond the Department of Defense to other parts of the national security establishment and to our friends and allies abroad. The report of the National Defense Panel suggests creating an interagency cadre of professionals, similar in spirit to the joint experience envisioned by the Goldwater-Nichols Defense Reorganization Act, with staff in key positions within the national security structures. While the committee is not recommending extending joint duty credit for assignments to interagency and international positions, there may be a need to identify, train, and manage officers with experience in interagency and international assignments. The committee directs the Secretary of Defense to conduct a study of the advisability and feasibility of establishing a cadre of officers whose assignments and schooling would be managed so as to ensure a viable career track in which these officers would serve in interagency and international assignments. The committee directs the Secretary of Defense to report on the results of the study to the Committee on Armed Services of the Senate and the National Security Committee of the House of Representatives not later than March 31, 1999.

B. A Capability-Based Framework for Officer Career Models

We believe the design of a career model to be applied to a selected set of officers should be directly related to the capabilities it is intended to provide to those officers who will then use those capabilities in operational assignments. This appendix develops a framework for describing career models from the perspective of the capabilities they are designed to develop and sustain. We first consider the dimensions over which capabilities can be characterized and then use these dimensions to construct a taxonomic framework for evaluating and selecting career models generally and career models for officers assigned to interagency and international positions specifically.

Characterizing Officer Capabilities

Officer capabilities can be characterized along a number of dimensions. We found two dimensions, reflecting characteristics of the capabilities that career models develop and sustain, particularly useful for analyzing officer career models: (1) the type of organizational outcome to which the capabilities contribute and (2) the nature of the capabilities. These two constructs help to explain why certain groups of officers are managed in the way they are and to suggest how other groups might best be managed—in particular, officers assigned to interagency and international positions.

Contribution of Capabilities to Organizational Outcomes

Capabilities can contribute to three types of outcomes: primary, military-specific, and common.

The *primary* outcome of a military organization can be stated in a number of ways, most of which reduce to winning the nation's wars. The combat units, and in particular the officers and enlisted personnel making up the units, possess capabilities to carry out complex tasks and activities—to conduct military operations—the desired result of which is winning the nation's wars. These capabilities directly affect the primary outcome sought by the organization. As we will see below, the central officer career model is designed to develop and sustain these core capabilities in a way that supports that primary outcome.

Capabilities also contribute to *military-specific* organizational outcomes (rather than to the primary outcome) important to the organization. For example, other outcomes¹ sought by the military organization include a medically and spiritually healthy force, ready to fight; a military justice system that promotes unchallenged fairness while reinforcing discipline; an efficient and effective procurement system; seamless joint operations. Some officers possess capabilities that contribute to these military-specific outcomes directly and substantially; for example, health professionals, chaplains, judge advocates, and acquisition and joint officers.

Finally, capabilities also contribute to important *common* outcomes desired by the organization, but not directly to military-specific or primary outcomes. The term "common" refers to the fact that these outcomes are useful to a number of organizational entities. For example, carrying out the tasks and activities to manage a military installation or shipyard is one of a number of capabilities, all important, that contribute indirectly, at most, to primary or military-specific organizational outcomes. Others include the capabilities of operations research officers, officers involved in the operation of a training installation, instructors in the ROTC program, and foreign area officers.

Of course, this dimension (as well as the next) reflects gradations between the two end points (common and military-specific) described. However, only when a capability is more predominately associated with an outcome significantly different from the primary outcome of the military organization (winning the nation's wars) does it begin to emerge as a possible candidate for management under a variation of the central model. Consequently, not a lot of attention to the exact placement along a dimension is necessary, or even useful, in order to employ this framework.

Nature of Capabilities

In addition, capabilities can be characterized by their nature or specificity. Broadly speaking, the capability to carry out tasks and activities may be military-specific or generic in nature.

Capabilities that are based on knowledge, experience, training, or education that is predominately focused on the military environment are *military-specific* in

¹Generally, "outcomes" refer to the final products or services of an organization that have value to its customers; "outputs" refer to intermediate products or services, often important to the organization, but not necessarily to the customers. Depending on whose perspective is being viewed, outputs can be outcomes. For simplicity, we use the term "outcomes" throughout this section to mean either outputs or outcomes.

nature.² The capabilities are most directly applicable to military operations or functions; they may have elements that are applicable to tasks and activities outside of the military environment, but they are developed mainly, and focused narrowly, to accomplish primarily military ends. Only military personnel are selected; training and education is generally provided in a particular military context, in military facilities; the structure of the organizations in which the activity is performed reflects that of operational units. The activities performed include joint operations, command of large military units, management of complex military installations, and conduct of basic and advanced military training. Certain officers possess capabilities that contribute to these ends, for example, joint officers, officers on the command track, and officers assigned to positions on installations or in the training base.

Capabilities that are based on knowledge, experience, training and education that are predominately focused on a body of knowledge, discipline or experience that is generally applicable to nonmilitary environments are *generic* in nature. The capabilities have applicability in (and are important to the effective functioning of) military organizations and the achievement of military ends, but they have much broader nonmilitary applicability. Both military and civilian personnel are selected to develop these kinds of capabilities; training and education are often obtained from civilian sources; the structure of the organizations in which the activity is performed is often different than the typical military unit. The ends sought include medical and spiritual well being, operational analysis, fiduciary integrity, and effective resource management. Certain officers possess capabilities that contribute to these ends, for example, medical officers, chaplains, operations research officers, finance officers and comptrollers.

Military-specific capabilities tend to focus on breadth of skills; generic capabilities tend to focus on depth of skills.

Initial Framework

Figure B.1 portrays a simple framework based on the two dimensions described above. Within this framework, we can position the different groups of officers in terms of their defining capabilities according to (1) the type of organizational outcome to which the capabilities contribute and (2) the nature of the capabilities. In region 1, for example, we find officers with military-specific capabilities that

²We are referring to the nature of the capability in this section; in the previous section, we were referring to the type of outcome to which the capability contributes.

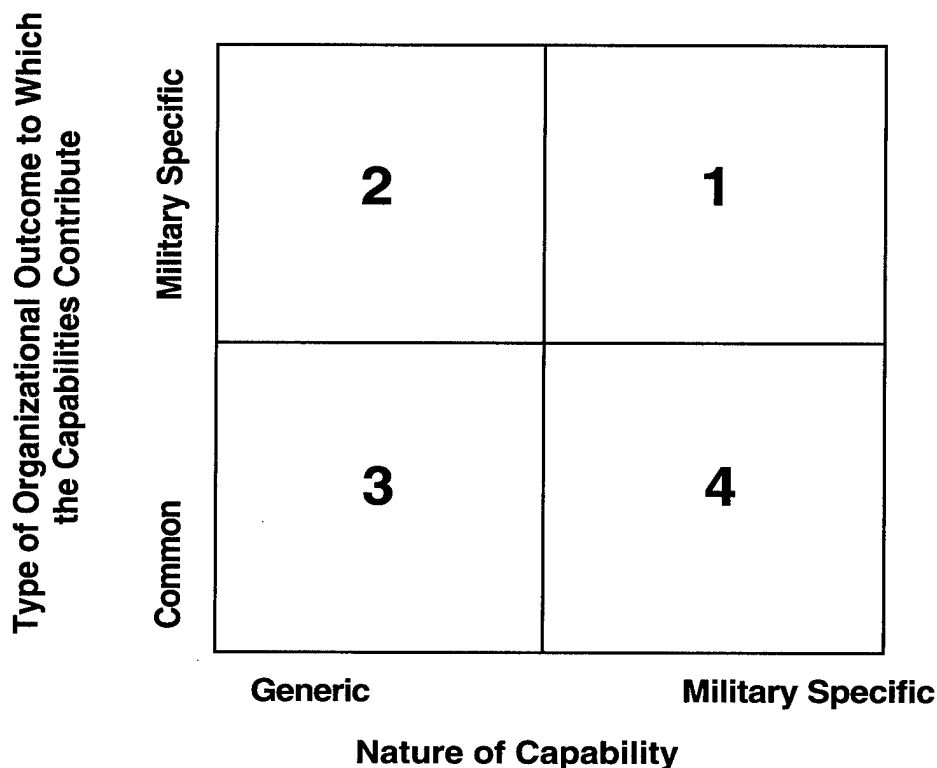


Figure B.1—Initial Framework

contribute substantially to military-specific outcomes (e.g., seamless joint operations; leadership of complex military formations) that are important to the organization. In region 2, we find officers with generic capabilities that contribute substantially to military-specific outcomes that are important to the organization, and so forth.

Specifically, we would find joint officers and senior commanders in region 1 and acquisition officers, health professionals, judge advocates, and chaplains in region 2. We would find finance officers, foreign area officers, comptrollers, and operations research officers in region 3, and officers assigned to training bases, installation management, recruiting duty and ROTC units in region 4.³

³How capabilities (and groups of officers) are arrayed in this framework depends on the part of the organization from which they are viewed. Different parts of the organization strive to achieve different outcomes, and one might expect that the importance or value that observers in these different parts of the organization attribute to a particular group of officers (and their capabilities) will depend, at least in part, on the contribution of these officers to its particular mission. Because most decisions affecting the management of officers are made centrally, we take the outcomes of interest as those for the organization as a whole.

These four regions can also be associated with the defining characteristic of the capabilities of the officers that carry out the activities in each region. The capabilities of those officers engaged in activities found in region 1, for example, reflect *critical capabilities* of the organization—in the case of the services, the activities at the highest levels of command. These are the most valuable assets, the ones requiring the organization's greatest attention; they are the primary manifestation of the military's *raison d'être*. The capabilities in region 2 reflect *key resources* of the organization. These officers provide capabilities that are important to achieving military-specific organizational outcomes, and their generic capabilities are generally expensive to acquire, develop and maintain. The capabilities in region 3 reflect a *specialist* character. The officers provide generic capabilities that have an impact on common, but important, organizational outcomes. The capabilities in region 4 reflect the *support core*. The activities found in this region are military-specific (or closely associated with military operations) and have an impact on common, but important, organizational outcomes.

The four regions suggest that officers might be managed in different ways (namely, using different career models) depending on the nature of their capabilities and the type of organizational outcome to which the capabilities contribute. We found this to be a useful perspective, but we needed to add an additional region to capture the full richness of this framework.

Complete Framework

As noted above, the capabilities of the majority of officers are focused on the primary outcome of the military organization—to win the nation's wars. In terms of the framework described above, this group of officers manifests a mix of military-specific and generic capabilities that contribute directly to the primary outcome desired by a military organization. As a result, it is appropriate that the central officer career model should be designed to identify, train, and manage this core capability. This perspective is reflected in the history of the officer personnel management system.⁴

⁴The officer personnel management system as it exists today evolved from a single officer career model generally applicable to all officers. Over time, particularly in the past sixty years, this single career model adjusted to changing needs. It gave rise to variations in career models that serve each of the four regions described above. These variations reflect special areas of focus. The variations, however, derive from the career model that covers the majority of officers. The general career model remains the core of the officer personnel management system today. It is currently based on the Defense Officer Personnel Management Act, but it had its predecessors in the Officer Personnel Act (OPA) and Officer Grade Limitation Act (OGLA). DOPMA and its predecessors all focused on the *raison d'être* of the services—the officers that comprise, and directly support, the combat forces.

We have represented the region reflecting the capabilities of this group as a diamond, and its relationship with the other regions is portrayed in Figure B.2.

Primary Focus of Officer Career Models

This framework suggests a primary focus for managing different categories or groups of officers.

The majority of officers are managed to ensure that the core capabilities of the military are maintained. As a result, this career management model (based on DOPMA, at present) is designed to identify, train, and manage officers to ensure they possess the capabilities to prosecute the military mission. Because the activities in which these officers engage are so diverse, this is the most general of the career models. The primary focus of this career model is "managing the generalist."

Variations of the career model for managing the generalist have arisen as the value of different capabilities possessed by groups of officers changed in terms of

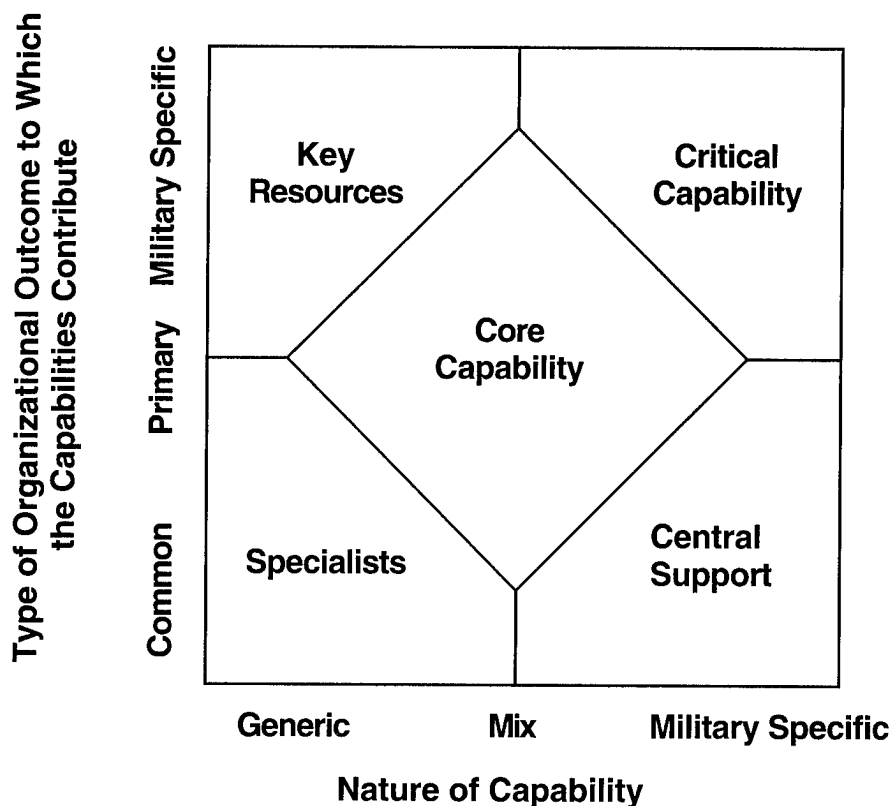


Figure B.2—Basic Framework

the type of organizational outcome to which their capabilities contribute and/or as the nature of the desired capabilities became better defined. Because of the importance of the core capability, however, these variations are primarily modifications of the career model for managing the generalist. As such, although many of the elements of the career model for managing the generalist are prominent in each of the variations, other elements, important to the specific capabilities required, differ.

Figure B.3 emphasizes that the career model for managing the generalist is the foundation for the development of the other career models and that the variations arose as the activities performed by a group of officers required a shift in capabilities along the dimensions portrayed in the framework.

To the degree that a group of officers is viewed as reflecting the organization's critical capabilities, a career model should focus on "managing leader succession." To the degree that a group of officers is viewed as reflecting the organization's key resources, a career model should focus on "managing competencies." To the degree that a group of officers is viewed as reflecting the organization's specialists, a career model should focus on "managing skills." To the degree that a group of officers is viewed as reflecting the organization's core support, a career model should focus on "managing the exception." Figure B.4 portrays the primary focus of the central career model and its variations—each of which is currently used to manage groups of officers.

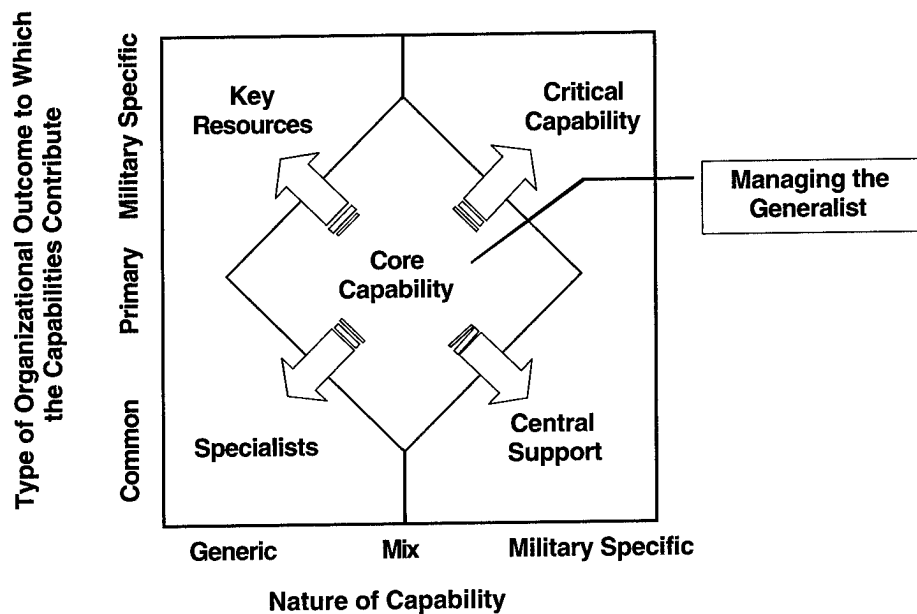


Figure B.3—Genesis of Variations in Career Models

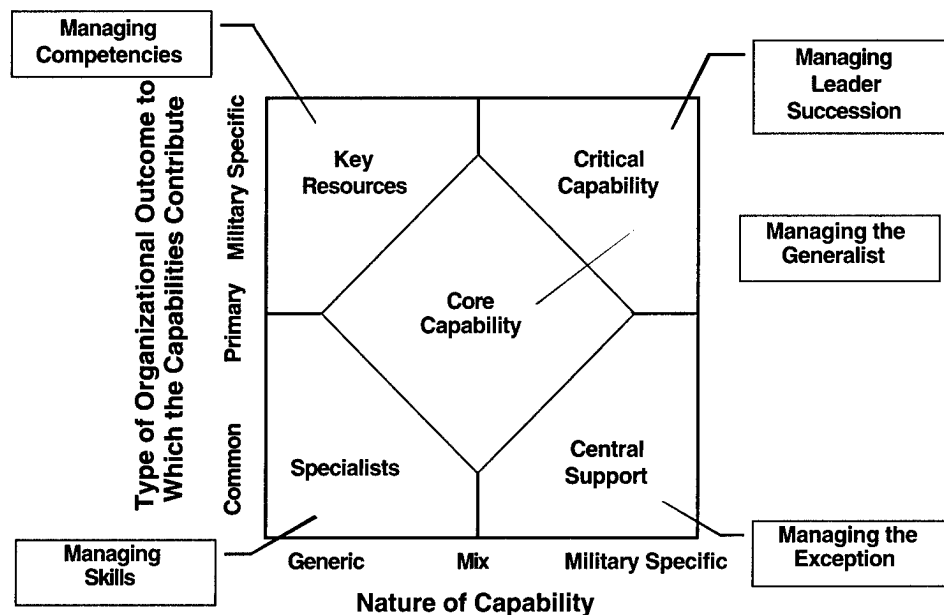


Figure B.4—Complete Framework

The primary focus in each region suggests major characteristics of the underlying career models. These are discussed in the body of the report.

Applying the Framework

Of course, such a framework is not necessarily prescriptive; it is, however, valuable in suggesting appropriate career models depending on how a category of officers is viewed in terms of their role in, and value to, the organization. This is particularly the case with regard to officers assigned to interagency and international positions. A fundamental issue concerns what their role in and value to the organization is. Some see it as military-specific and contributing directly to the most important military-specific outcomes of the organization (managing leader succession). Others see it as military specific and contributing to common, but important outcomes (managing the exception). Some see it as a key resource (managing competencies); others, as a specialty (managing skills). Until the fundamental issue can be resolved, discussion of the feasibility and advisability of particular career models is unlikely to be compelling. Once it is resolved, the principal characteristics of a viable career model are pretty much determined.

C. Managing Leader Succession Feasibility Model Description

Interagency and International Position Assumptions

This appendix explores the career flow implications of the "managing leader succession" model, given the 330 interagency and international positions discussed in Section 2. The number of positions for each service is shown in Table C.1; the grade distribution is shown in Table C.2.

The Army Example

Sector 1—Progression Through the Grade of O-4

The interagency and international leadership succession model is intended to represent a viable career path that fills the interagency and international positions at each grade with quality officers and that rewards interagency and international assignments with a greater chance of promotion, including promotion to general officer.

This model is divided into three sectors, each representing the movement of officers through either O-4, O-5, or O-6 assignments and schooling. Figure C.1 displays the first model sector, which represents the movement of officers at the grade of O-4. The following discussion describes this model sector, including model design, input data and assumptions, and model output.

This model assumes that higher-quality officers will be assigned to interagency and international positions, based upon a promotion rate similar to that for joint service. Thus this model is intended only to include the higher-quality officers, represented here by those who have completed O-4 schooling, such as Command

Table C.1
Assumed Interagency and International
Positions by Service

	Army	Navy	Air Force	Marine Corps
Percentage of total	32	22	42	5
Number of positions	104	71	140	15

Table C.2
Assumed Interagency and International
Positions by Service and Grade

Grade	Army Positions		Navy Positions		Air Force Positions		Marine Corps Positions	
	%	No.	%	No.	%	No.	%	No.
O-4	7	7	8	6	14	19	13	2
O-5	48	50	54	38	56	78	67	10
O-6	45	47	38	27	31	43	20	3
Total	100	104	100	71	100	140	100	15

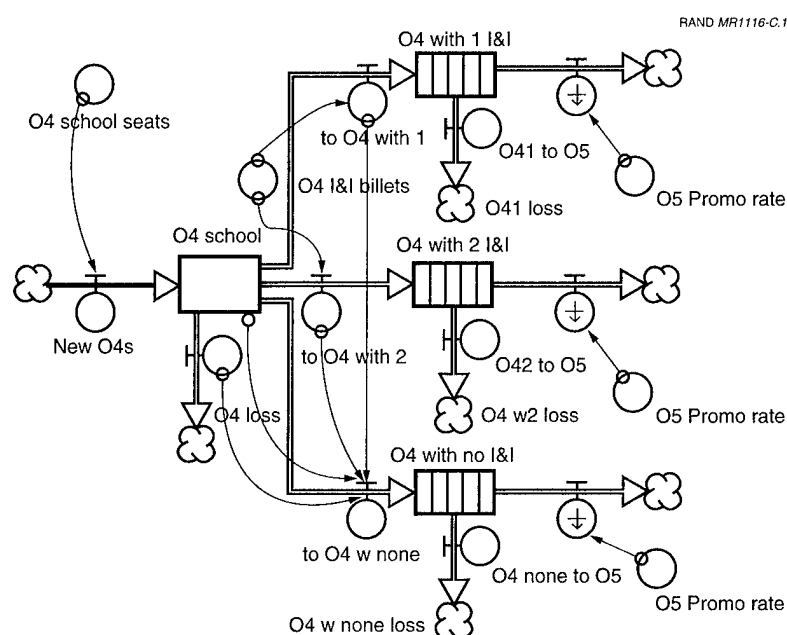


Figure C.1—The O-4 Sector of the Leadership Succession Model¹

and General Staff College in the case of the Army, as residents. Thus, the first box or “stock” in Figure C.1 is labeled “O4 school.” Throughout this model, the arrows with circles hanging from them represent flows, or movements of individuals, and the stocks indicate accumulations of individuals. The clouds that begin and end each model path represent sources or destinations of individuals outside the model. Circles that stand alone, such as the “O4 school seats” above the stock “O4 school” represent supporting data. The lines that connect model elements indicate a data relationship. In the case of this model

¹The modeling was conducted with ithink software by high Performance Systems, Inc. All modeling illustrations are printouts from ithink software.

sector, the number of "O4 school seats" limits the number of "New O4s" that can enter "O4 school" each year. "O4 loss" represents those officers who attrite from O-4 school to leave the service, although very few, if any, officers are assumed to leave the service while attending intermediate service school. The number of seats available in each of the service's intermediate service schools is excerpted from the DoD Military Manpower Training Report FY 1999, and shown in Table C.3.

The model advances one year at a time, so those emerging from "O4 school" represent those who have graduated in a single year. After graduation, each officer is assumed to advance to one of three assignment alternatives. The alternatives represent the rest of the time that officers spend at the grade of O-4, and are shown as stocks with vertical lines: "O4 with 1 interagency and international," "O4 with 2 interagency and international" and "O4 with no interagency and international." In other words, the model assumes that each officer who leaves intermediate service school advances onto two assignments at the grade of O-4. These two assignments might include one interagency and international assignment, or the individual's assignments at the grade of O-4 might both be interagency and international assignments, or the officer might not experience any interagency and international assignments. The vertical lines indicate that these stocks retain the officers for a certain period of time, in this case the 5 years to progress through two assignments.

The valves that control movement to each of these stocks are "to O4 with 1," "to O4 w 2," and "to O4 w none." The values for each of these valves are shown in Table C.4. Most interagency and international positions will likely be filled with officers who serve in only one interagency and international position within the grade of O-4. Thus, the value for "to O4 w 1" indicates that .9 of the total O-4 interagency and international positions are filled. The total number of positions is divided by 5 because 5 is the duration of that stock, and thus one-fifth of its capacity enters each year. Finally, the value is multiplied by two, because only half of this stock represents interagency and international positions, so there

Table C.3
Intermediate Service Schools
Output (active duty)

	FY 98	FY 99
Army	869	871
Navy	1,356	1,342
Air Force	738	737
Marine Corps	432	527

must be twice as many individuals in this stock as there are interagency and international positions being filled by these officers. The entry valve to the second assignment alternative is "to O4 w 2." This value is set to represent the remaining ten percent of interagency and international positions, and is again divided by 5 because of the duration of the stock. However, this value need not be multiplied by 2 because every individual in this stock is serving in an interagency and international assignment. The third valve controls the flow of officers who have completed their school but do not serve in an interagency and international assignment at the grade of O-4. This valve is set to the number of officers who attended the school, minus those who left school to serve in either one or two interagency and international assignments, and minus the small number of individuals who did not complete the school. These relationships between model entities are indicated in Figure C.1 with lines and arrows.

Table C.4 indicates the values² of the valves and of the associated stock ("O4 with 1 interagency and international," "O4 with 2 interagency and international," and "O4 with no interagency and international) for the Army example.³

This model conservatively addresses attrition from each grade by assuming that those individuals who would attrite from each grade are not those who would be promoted. This assumption maximizes the number of individuals with interagency and international experience who are promoted to each successive grade. Thus, from each of the three O-4 assignment stocks, there are two output valves. One indicates those officers selected for promotion to the grade of O-5,

Table C.4
Values for O-4 Assignment Valves (Army)

Valve	Equation	Valve Value	Resulting Stock Value
to O4 w 1	$0.90 * (\text{O4 interagency and international positions}/5) * 2$	2.52	12.60
to O4 w 2	$0.10 * (\text{O4 interagency and international positions}/5)$	0.14	0.70
to O4 w none	$(\text{O4 school}) - (\text{to O4 w 1}) - (\text{to O4_w_2}) - (\text{O4_loss})$	865.34	4,326.70

²All model output values reported throughout this description are steady-state values.

³Although interpretation of the model results requires conversion to whole numbers, the model calculates more precisely, and this description leaves in the greater level of detail. While one cannot consider a fraction of an entity when the entity is a human being, the fractional numbers provide insights. For example, when a valve permits .4 of an officer through on an annual basis, this can be interpreted to indicate that an officer may pass through every two to three years. This is more useful than rounding that value to zero. For this description, the values provided in the tables have been left in decimal form.

and the other indicates those who have finished their two assignments but are not selected for promotion. The promotion valves are labeled "O41 to O5," "O42 to O5," and "O4none to O5." Each of these is based on the promotion rate to O-5, represented in the model by "O5 Promo rate," which is connected to each of these output valves. For the purposes of this model illustration, the promotion rate to the grade of O-5 is assumed to be 59.9 percent, based on the promotion rates reported to the Secretary of Defense for line officers. The reported promotion rates for each of the services' line officers are shown in Table C.5. However, this promotion rate does not affect all officers in this model the same way. Because all officers in the model attended the O-4 school as residents, they are assumed to be promoted at least as well as the average promotion rate. However, officers who have experienced two interagency and international assignments are assumed to have sacrificed some key service assignments, and thus they are promoted at just the average rate, whereas those officers who served only one interagency and international assignment, and those officers who served no interagency and international assignments are promoted at slightly higher rates. The values for these are shown in Table C.6.

Sector 2—Progression Through the Grade of O-5

The second sector of the model simulates the passage of officers through the grade of O-5. This model is shown in three parts below, in Figures C.2 through C.4. The first portion of the model, shown in Figure C.2, models those officers who served in a single interagency and international assignment while they were

Table C.5
Reported Promotion Rates for
Line Officers (in zone, %)

To Grade	Army	Navy	Air Force	Marine Corps
O-5	59.9	64.5	63.0	68.2
O-6	41.2	47.3	41.9	42.4
O-7	2.5	2.8	2.2	2.8

Table C.6
Values for Promotion Valves to O-5 (Army)

Valve	Equation	Valve Value
O41 to O5	$1.1 * (\text{O5 Promo rate})$	1.66
O42 to O5	(O5 Promo rate)	0.08
O4none to O5	$1.1 * (\text{O5 Promo rate})$	570.17

at the grade of O-4. Thus, most of the elements of this portion of the model begin with "O41." The second portion of the model, shown in Figure C.3, is very similar in design to the first, except that it represents those officers who served in two interagency and international positions, and thus most of the elements of this part of the model begin with "O42." The third portion of the model, Figure C.4, is based upon "O4none" officers. These three parts of this model sector are very similar, and generally differ only in the equations within the model. Thus, this discussion will describe the first part of this model sector in detail, but will provide the equations and values for all like stocks or valves in this model sector. Where the third part differs slightly in the initial assignment of officers, it will be described separately.

The officers who served interagency and international assignments at the grade of O-4 and then were promoted to O-5 can have three assignment paths at the grade of O-5. Similar to the options at the prior grade, they can have one, two, or no interagency and international assignment(s). In Figure C.2, the first model sector charts these assignment options for officers who served a single interagency and international assignment at the grade of O-4.

Given the current calculations of the first model sector, there are approximately two officers who are promoted to O-5 every year after serving a single interagency and international assignment. The model assumes that the majority of these officers will not serve in an interagency and international assignment as

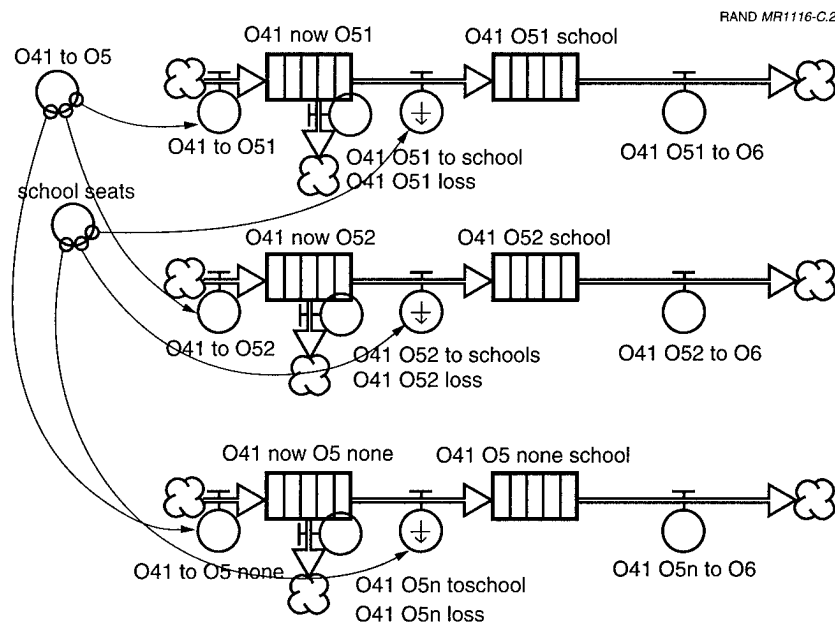


Figure C.2—Part 1 of the O-5 Sector of the Leadership Succession Model

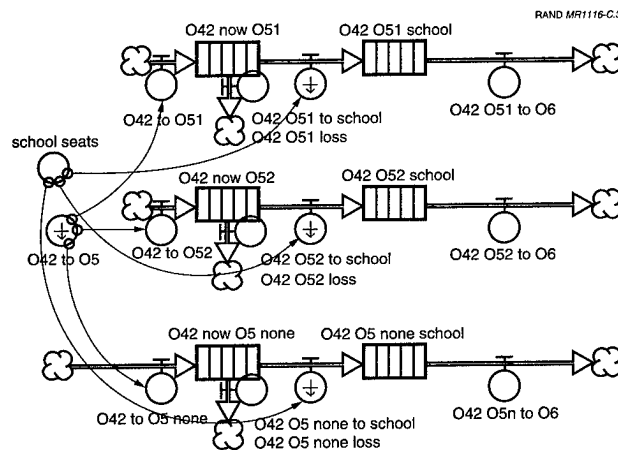


Figure C.3—Part 2 of the O-5 Sector of the Leadership Succession Model

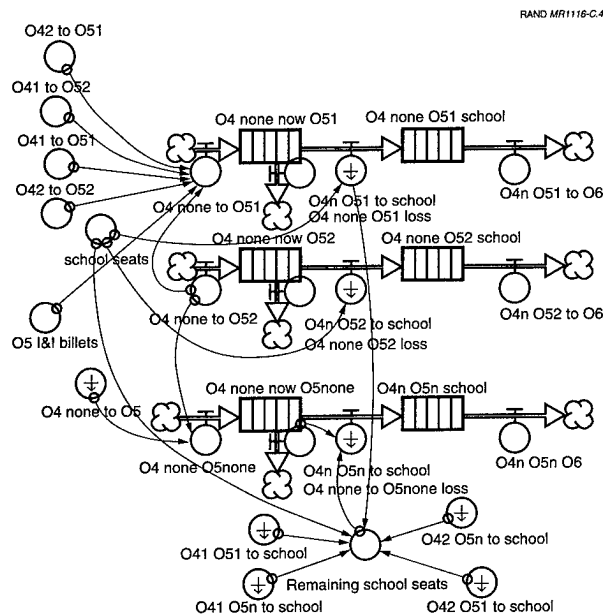


Figure C.4—Part 3 of the O-5 Sector of the Leadership Succession Model

an O-5. Thus the model assigns only 20 percent of them to a single interagency and international assignment and only 10 percent of them to a double interagency and international assignment path. The values for the valves to the assignment alternatives are shown in Table C.7. This table indicates the valve name, the equation for that valve, and the value of that valve.

In this Army example, very few officers who served two interagency and international assignments at the grade of O-4 are promoted to O-5, so for the

Army excursion, the second part of this model sector is essentially a "dead" portion of the model. Nonetheless, the equations are set so that 10 percent of these officers serve a third interagency and international assignment, and another 10 percent of them serve double interagency and international assignments at the grade of O-5. The remaining 80 percent of these officers do not serve in interagency and international assignments at the grade of O-5.

The equations for the third portion of this model sector simulate the passage of officers who have not served in interagency and international assignments prior to promotion to O-5. This model sector ensures that all the interagency and international positions for the grade of O-5 have been filled. The model assumes that only small numbers of officers will serve in two interagency and international assignments at the grade of O-5. Thus "O4none to O52" is set to two. Then "O4none to O51" divides the total number of O-5 interagency and international positions by 5, which is the length of two tours, and subtracts the other assignments to interagency and international positions. This figure is then multiplied by 2, because only half of the officers who pass through this valve will be filling interagency and international assignments at any one time. "O4none to O5none" catches all officers who have never been assigned to an interagency and international position by subtracting those "O4none to O51" and "O4none to O52" from "O4none to O5."

Table C.7
Movement into O-5 Assignments (Army)

Valve	Equation	Valve Value
O41 to O51	$0.2 * (\text{O41 to O5})$	0.33
O41 to O52	$0.1 * (\text{O41 to O5})$	0.17
O41 to O5none	$0.7 * (\text{O41 to O5})$	1.16
O42 to O51	$0.1 * (\text{O42 to O5})$	0.01
O42 to O52	$0.1 * (\text{O42 to O5})$	0.01
O42 to O5none	$0.8 * (\text{O42 to O5})$	0.06
O4none to O51	$2 * \{(\text{O5 interagency and international positions}/5)$ $- [0.5 * (\text{O42 to O51})]$ $- (\text{O42 to O52})$ $- [0.5 * (\text{O41 to O51})]$ $- (\text{O41 to O52})$ $- (\text{O4none to O52})\}$	15.31
O4none to O52	2	2.00
O4none to O5none	$(\text{O4none to O5}) - (\text{O4none to O51})$ $- (\text{O4none to O52})$	552.86

As the third column in Table C.7 indicates, most of the officers who serve in interagency and international positions at the grade of O-5 are doing so for the first time. Table C.8 indicates the total number of interagency and international positions at the O-5 grade filled by officers with each assignment history. This number is either the value of the stock, when the stock represents a double interagency and international assignment; or half the value of the stock, when the stock represents a single interagency and international assignment. As before, the names of the stock indicate the assignment history of the officers within that stock. For example, "O41 now O51" represents officers who served in a single interagency and international assignment while they were at the grade of O-4 and then serve in one interagency and international assignment as O-5s.

The outputs from the O-5 assignment stocks are of two types: selection to O-5 school, and other output or loss. Thus, officers who are not selected to attend the senior service college (SSC) are no longer tracked in this model, given the intent of treating officers who serve interagency and international positions as high-quality officers and thus only modeling the high-quality officers. The model makes the assumption that officers who would be selected for SSC, and thus have much greater likelihood of promotion to O-6, would not leave the service as O-5s at a high rate. Further, the model minimizes loss rates in order to maximize the number of officers with interagency and international experience. Should other loss assumptions apply, the number of officers with interagency and international experience would decrease.

Table C.9 indicates the equations for the valves that select officers for SSC, and the number of officers in SSC with each assignment history. "School seats"

Table C.8
O-5 Assignments and the Interagency and
International Positions Filled (Army)

Stock	Stock Value	Approximate Number of Interagency and International Positions Filled
O41 now O51	1.66	1
O41 now O52	0.83	1
O41 now O5none	5.81	0
O42 now O51	0.04	0
O42 now O52	0.04	0
O42 now O5none	0.32	0
O4none now O51	76.55	38
O4none now O52	10.00	10
O4none now O5none	2,764.31	0

represents the number of SSC slots available. The output of each of the services' Senior Service Colleges is shown in Table C.10. For the purpose of this model, "school seats" was set to 249. Because interagency and international positions are treated like joint duty assignments (indeed most are on the JDAL), the officers who experience moderate numbers of interagency and international assignments are assumed to have a greater-than-usual chance of selection for SSC and advancement to the next grade. Those officers who serve two interagency and international assignments at the grade of O-5 were assumed not to be competitive for promotion to O-6, and thus were not selected for SSC. Likewise, those officers who served two interagency and international assignments at the grade of O-4 were also assumed to be less competitive for selection for SSC (although few of them were even promoted to the grade of O-5). Those officers

Table C.9
Selection for Senior Service College (Army)

Valve	Valve Equation	Valve Value
O41 O51 to school	$0.20 * (\text{school seats})$	0.33
O41 O52 to school	$0.00 * (\text{school seats})$	0.00
O41 O5n to school	$0.20 * (\text{school seats})$	1.16
O42 O51 to school	$0.05 * (\text{school seats})$	0.01
O42 O52 to school	$0.00 * (\text{school seats})$	0.00
O42 O5n to school	$0.08 * (\text{school seats})$	0.07
O4n O51 to school	$\text{MIN}[0.90, \{(0.35 * \text{school seats}) / (\text{O4none now O51}/5)\}]$	13.78
O4n O52 to school	$0.00 * (\text{school seats})$	0.00
O4n O5n to school	$\text{MIN}[0.90, \{0.8 * (\text{remaining school seats}) / (\text{O4none now O5none}/5)\}]$	186.92

Table C.10
Approximate Annual Active Duty Officer Graduates of the Senior Service Colleges

	Graduates
Army	249
Navy	240
Air Force	217
Marine Corps	23

SOURCE: Data Compiled by Joint Staff, Military Education Division (J7) as of Sept/Oct 1998. Author assumes division of National War College seats 30 percent each for Army, Air Force, and Navy, and remaining 10 percent for Marine Corps.

considered less competitive for promotion to O-6 have a smaller share of the school seats, and because the majority of officers have not served any interagency and international assignments, that group received the greater share of school seats. Additionally, because some small percentage of school seats may be taken by officers who did not attend O-4 school as a resident, 10 percent of the seats have been set aside for officers not included in this model. Two of the valve equations use the MIN function to ensure that the number of school seats is not exceeded by the number of students progressing to SSC. In the case of "O4n O51 to school," the valve will be set to the smaller of two values: 90 percent of the officers with this career path eligible for selection to SSC, or 35 percent of the school seats. In the case of "O4n O5n to school," the valve will be set to the lesser of the two following values: 90 percent of the officers eligible for selection to SSC, or 80 percent of the school seats remaining after officers with the other assignment histories in this model have been selected for senior service college.

In this case, given the small number of officers with interagency and international experience and the large number of school seats, all officers who have had interagency and international experience and that show promise of promotion to O-6 (i.e., not those who served two interagency and international assignments at the grade of O-5) are selected for SSC. In other words, the valves of interagency and international officers not set to zero are unrestricted by their share of school seats, so all officers pass through to school. Because the SSC is approximately one year in duration, the number of officers at the school is equal to the valve to the school (e.g., "O41 O51 to school").

Sector 3—Progression Through the Grade of O-6

The third sector of the model continues officers' movements through the grade of O-6. This sector has nine parts, and each begins with the promotion of officers from a particular assignment path to O-6, such as "O41 O51 to O6," which represents those officers who served one interagency and international assignment at both the grade of O-4 and the grade of O-5 and then are promoted to O-6. The first eight of these parts are identical in structure, and differ only in their equation coefficients. One of these eight model parts is shown in Figure C.5. The ninth part, which simulates officers who have not served in interagency and international positions prior to their promotion to O-6, differs slightly from the other parts. This part is shown in Figure C.6, and the differences will be discussed in the following text.

Table C.11 indicates the valves that control entry to the various parts of this third model sector. The second column contains the values for each of these valves.

These values are a reiteration of the number of individuals that entered Senior Service College. A year later, they are progressing into O-6 assignments. For each model part, the initial entry valve, such as O41 to O51 to O6 is divided into three valves that assign officers to either one, two, or no interagency and international assignments during their time at the grade of O-6. The third, fourth, and fifth columns of the table provide these valve names, equations, and actual values.

The entries in both the second column (the value of the valve to each model portion) and the fifth column (the values for the valves that control assignment to

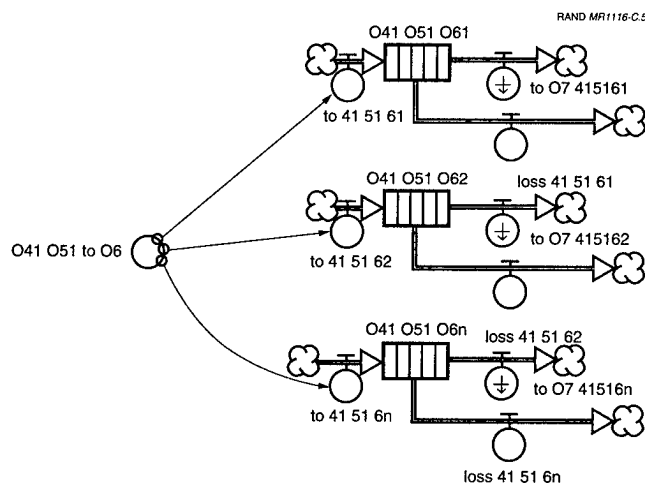


Figure C.5—Part 1 of the O-6 Sector of the Leadership Succession Model

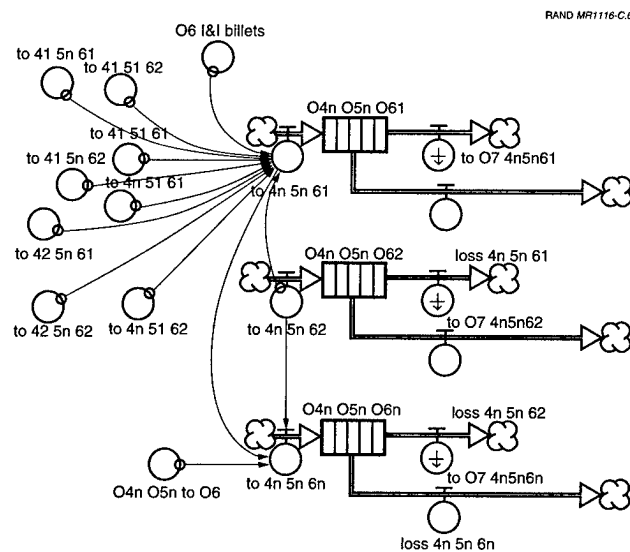


Figure C.6—Part 9 of the O-6 Sector of the Leadership Succession Model

Table C.11
Movement of O-6 Officers into Assignments (Army)

Promotion to O-6 Valve	Valve Value	Valves for entry to O-6 assignments	Valve Equation	Valve Value
O41 O51 to O6	0.33	to 41 51 61	0.50 * (O41 O51 to O6)	0.17
		to 41 51 62	0.10 * (O41 O51 to O6)	0.03
		to 41 51 6n	0.40 * (O41 O51 to O6)	0.13
O41 O52 to O6	0.00	to 41 52 61	0.33 * (O41 O52 to O6)	0.00
		to 41 52 62	0.33 * (O41 O52 to O6)	0.00
		to 41 52 6n	0.33 * (O41 O52 to O6)	0.00
O41 O5n to O6	1.16	to 41 5n 61	0.70 * (O41 O5n to O6)	0.81
		to 41 5n 62	0.15 * (O41 O5n to O6)	0.17
		to 4n 5n 6n	0.15 * (O41 O5n to O6)	0.17
O42 O51 to O6	0.01	to 42 51 61	0.33 * (O42 O51 to O)	0.00
		to 42 51 62	0.33 * (O42 O51 to O)	0.00
		to 42 51 6n	0.33 * (O42 O51 to O)	0.00
O42 O52 to O6	0.00	to 42 52 61	0.33 * (O42 O52 to O6)	0.00
		to 42 52 62	0.33 * (O42 O52 to O6)	0.00
		to 42 52 6n	0.33 * (O42 O52 to O6)	0.00
O42 O5n to O6	0.07	to 42 5n 61	0.33 * (O42 O5n to O6)	0.02
		to 42 5n 62	0.33 * (O42 O5n to O6)	0.02
		to 42 5n 6n	0.33 * (O42 O5n to O6)	0.02
O4n O51 to O6	13.78	to 4n 51 61	0.70 * (O4n O51 to O6)	9.65
		to 4n 51 62	0.15 * (O4n O51 to O6)	2.07
		to 4n 51 6n	0.15 * (O4n O51 to O6)	2.07
O4n O52 to O6	0.00	to 4n 52 61	0.33 * (O4n O52 to O6)	0.00
		to 4n 52 62	0.33 * (O4n O52 to O6)	0.00
		to 4n 52 6n	0.33 * (O4n O52 to O6)	0.00
O4n O5n to O6	186.92	to 4n 5n 61	2.00 * {(O6 interagency and international positions/6) - (to 4n 5n 62) - [0.5 * (to 41 51 61)] - (to 41 51 62) - [0.5 * (to 41 5n 61)] - (to 41 5n 62) - [0.5 * (to 42 5n 61)] - (to 42 5n 62) - [0.5 * (to 4n 51 61)] - (to 4n 51 62)}	0.00
		to 4n 5n 62	1	1.00
		to 4n 5n 6n	(O4n O5n to O6) - (to 4n 5n 61) - (to 4n 5n 62)	185.92

each path at the grade of O-6) indicate that there are some "dead" portions of the model. In other words, few or no people have survived in the model to this point, generally because they were not promoted. In these instances, the valves were equally divided among the three assignment alternatives, and the model remains viable for examining scenarios that would revive these portions of the model by changing earlier assumptions.

Assumed assignment policies determine the values of the valves for "live" portions of the model as follows. First, half those officers who served in one interagency and international assignment at each of the prior two grades are assumed to be assigned to another interagency and international assignment. Very few of these officers are assumed to spend their entire time at the grade of O-6 in interagency and international assignments.

The officers who served in a single interagency and international assignment at the grades of O-4 or O-5 are assumed to be very competitive for the high-profile interagency and international positions. These officers are also assumed to be very competitive for promotion to O-7, so only one of their O-6 assignments is interagency and international, so as to permit them the opportunity to fill an important in-service position, such as a command assignment. Thus, the majority of these officers are assigned to a single interagency and international assignment while they are at the grade of O-6.

A small number of officers who have never previously served in an interagency and international assignment may serve in repeated interagency and international assignments, so this valve was set to one per year. The valve that permits officers to serve their first interagency and international assignment as an O-6 is set to ensure that all interagency and international positions are filled. However, the priority for interagency and international assignments at the grade of O-6 in this model is assumed to be those officers who have some interagency and international experience. In this scenario, almost all the interagency and international positions can be filled without assigning officers who have had no prior interagency and international experience to a single interagency and international assignment at the grade of O-6. Table C.12 shows a total of 52 officers available for assignment to interagency and international positions, given even the conservative assignment policies of this model. These 52 include six officers assigned to interagency and international assignments for the first time. Thus, even deleting these officers puts the Army very close to the target of 47 interagency and international assignments at the grade of O-6. Thus, if the services assign officers without prior interagency and international experience to such positions at the grade of O-6, the service has a surplus of approximately six officers who can be assigned to such positions.

Table C.12
O-6 Officer Assignments (Army)

Assignment Stock	Value of Stock (officers in the assignments)	Approximate Number of Interagency and International Assignments Possibly Filled
O41 O51 O61	1.00	1
O41 O51 O62	1.20	1
O41 O51 O6n	0.80	0
O41 O5n O61	4.88	2
O41 O5n O62	1.05	1
O41 O5n O6n	1.05	0
O42 O5n O61	0.13	0
O42 O5n O62	0.13	0
O42 O5n O6n	0.13	0
O4n O51 O61	57.87	29
O4n O51 O62	12.40	12
O4n O51 O6n	12.40	0
O4n O5n O61	0.00	0
O4n O5n O62	6.00	6
O4n O5n O6n	1,115.52	0
Total		52

The Air Force Example

This modeling is based upon assumptions regarding the number of total interagency and international positions and the proportion of these positions that require officers of different grades. The prior description detailed the modeling calculations and results based upon the number of positions and the grade distribution likely for Army interagency and international positions. One possible excursion to this analysis is to base the modeling upon the interagency and international positions more likely for the Air Force. The Air Force will likely have several more positions to fill, and will likely have a distinctly different distribution across grades, as Table C.2 indicated. Additionally, for the purpose of this modeling, we will assume the Air Force to have fewer intermediate service school and senior service college "school seats," as shown in Tables C.3 and C.10.

The following text and tables provide a streamlined explanation of the model results with these variations to model input. Table C.13 indicates the results of the model segment that assigns officers at the grade of O-4 to assignments. As indicated in Table C.2, the Air Force has only 19 interagency and international positions for officers at the grade of O-4, so the value values and the resulting

stock values in Table C.13 are higher for the Air Force. Given that half of the officers in "O4 w 1" are serving in interagency and international positions at any one time, the resulting stock values indicate a total of 19 interagency and international positions filled.

Table C.14 indicates the promotion of these officers to the grade of O-5. The promotion rates used are shown in Table C.5.

Table C.15 indicates the movement of officers into O-5 assignments. In this excursion, as before, the majority of officers who served in interagency and international assignments at the grade of O-4 are not assigned to interagency and international assignments at the grade of O-5 (Table C.16).

Table C.13
Values for O-4 Assignment Valves

Valve	Equation	Valve Value		Resulting Stock Value	
		Army	Air Force	Army	Air Force
To O4 w 1	$0.90 * (\text{O4 interagency and international positions}/5) * 2$	2.52	6.84	12.60	34.20
To O4 w 2	$.010 * (\text{O4 interagency and international positions}/5)$	0.14	0.38	0.70	1.90
To O4 w none	$(\text{O4 school}) - (\text{to O4 w 1}) - (\text{to O4_w_2}) - (\text{O4_loss})$	865.34	728.78	4,226.70	3,643.90

Table C.14
Values for Promotion Valves to O-5 (Air Force)

Valve	Equation	Valve Value
O41 to O5	$1.1 * (\text{O5 promo rate})$	4.74
O42 to O5	(O5 promo rate)	0.24
O4none to O5	$1.1 * (\text{O5 promo rate})$	505.04

Table C.15
Movement into O-5 Assignments

Valve	Equation	Valve Value	
		Army	Air Force
O41 to O51	$0.2 * (O41 \text{ to } O5)$	0.33	0.95
O41 to O52	$0.1 * (O41 \text{ to } O5)$	0.17	0.47
O41 to O5none	$0.7 * (O41 \text{ to } O5)$	1.16	3.32
O42 to O51	$0.1 * (O42 \text{ to } O5)$	0.01	0.02
O42 to O52	$0.1 * (O42 \text{ to } O5)$	0.01	0.02
O42 to O5none	$0.8 * (O42 \text{ to } O5)$	0.06	0.19
O4none to O51	$2 * \{(O5 \text{ interagency and international positions}/5) - [0.5 * (O42 \text{ to } O51)] - (O42 \text{ to } O52) - [0.5 * (O41 \text{ to } O51)] - (O41 \text{ to } O52) - (O4none \text{ to } O52)\}$	15.31	25.23
O4none to O52	2	2.00	2.00
O4none to O5none	$(O4none \text{ to } O5) - (O4none \text{ to } O51) - (O4none \text{ to } O52)$	552.86	477.81

Table C.16
O-5 Assignments and the Interagency and International Positions Filled

Stock	Stock Value		Approximate Number of Interagency and International Positions Filled	
	Army	Air Force	Army	Air Force
O41 now O51	1.66	4.74	1	2
O41 now O52	0.83	2.37	1	2
O41 now O5none	5.81	16.59	0	0
O42 now O51	0.04	0.12	0	0
O42 now O52	0.04	0.12	0	0
O42 now O5none	0.32	0.96	0	0
O4none now O51	76.55	126.16	38	63
O4none now O52	10.00	10.00	10	10
O4none now O5none	2,764.31	2,389.06	0	0
Total	2,859.35	2,550.12	50	77

As Table C.17 indicates, in the Air Force example, more officers who have had interagency and international experience (at the grade of O-4) are selected for senior service college.

Table C.18 indicates the assignment patterns of officers promoted to O-6. The segments of the O-6 portion of the model which had zero or minimal values in the Army excursion are also "dead" in the Air Force excursion.

Table C.17
Selection for Senior Service College

Valve	Valve Equation	Valve Value	
		Army	Air Force
O41 O51 to school	0.20 * (school seats)	0.33	0.95
O41 O52 to school	0.00 * (school seats)	0.00	0.00
O41 O5n to school	0.20 * (school seats)	1.16	3.32
O42 O51 to school	0.05 * (school seats)	0.01	0.03
O42 O52 to school	0.00 * (school seats)	0.00	0.00
O42 O5n to school	0.08 * (school seats)	0.07	0.19
O4n O51 to school	MIN[0.90, {(0.35 * school seats)/ (O4none now O51/5)}]	13.78	22.71
O4n O52 to school	0.00 * (school seats)	0.00	0.00
O4n O5n to school	MIN[0.90, {0.8 * (remaining school seats)/(O4none now O5none/5)}]	186.92	151.85

Table C.19 indicates the values of the assignment stocks in the O-6 portion of the model, or the numbers of officers at the grade of O-6 with each variation of assignment history. The purpose of this part of the model is to explore how many officers could be assigned to interagency and international positions with a relatively conservative assignment policy. In other words, many of those who served in interagency and international positions at earlier grades are not assigned to interagency and international positions again at the grade of O-6. The results shown in Table C.19 come from relatively conservative assignment policies (i.e., assigning most officers with interagency and international experience to positions not in the interagency and international community). For the Army, there is still a slight surplus of officers with interagency and international experience who could serve in interagency and international assignments, and thus some flexibility in how the 47 interagency and international positions at the grade of O-6 are filled. The Air Force results indicate a large surplus, and thus considerable flexibility in how it might fill its 43 interagency and international positions at the grade of O-6.

Table C.18
Movement of O-6 Officers into Assignments

Promotion to O-6 Valve	Valve Value		Valves for Entry to O-6 Assignments	Valve Equation		Valve Value	
	Army	Air Force				Army	Air Force
O41 O51 to O6	0.33	0.95	to 41 51 61 to 41 51 62 to 41 51 6n	0.50 * (O41 O51 to O6) 0.10 * (O41 O51 to O6) 0.40 * (O41 O51 to O6)		0.17 0.03 0.13	0.47 0.09 0.38
O41 O52 to O6	0.00	0.00	to 41 52 61 to 41 52 62 to 41 52 6n	0.33 * (O41 O52 to O6) 0.33 * (O41 O52 to O6) 0.33 * (O41 O52 to O6)		0.00 0.00 0.00	0.00 0.00 0.00
O41 O5n to O6	1.16	3.32	to 41 5n 61 to 41 5n 62 to 4n 5n 6n	0.70 * (O41 O5n to O6) 0.15 * (O41 O5n to O6) 0.15 * (O41 O5n to O6)		0.81 0.17 0.17	2.32 0.50 0.50
O42 O51 to O6	0.01	0.02	to 42 51 61 to 42 51 62 to 42 51 6n	0.33 * (O42 O51 to O6) 0.33 * (O42 O51 to O6) 0.33 * (O42 O51 to O6)		0.00 0.00 0.00	0.01 0.01 0.01
O42 O52 to O6	0.00	0.00	to 42 52 61 to 42 52 62 to 42 52 6n	0.33 * (O42 O52 to O6) 0.33 * (O42 O52 to O6) 0.33 * (O42 O52 to O6)		0.00 0.00 0.00	0.00 0.00 0.00
O42 O5n to O6	0.07	0.19	to 42 5n 61 to 42 5n 62 to 42 5n 6n	0.33 * (O42 O5n to O6) 0.33 * (O42 O5n to O6) 0.33 * (O42 O5n to O6)		0.02 0.02 0.02	0.06 0.06 0.06
O4n O51 to O6	13.78	22.71	to 4n 51 61 to 4n 51 62 to 4n 51 6n	0.70 * (O4n O51 to O6) 0.15 * (O4n O51 to O6) 0.15 * (O4n O51 to O6)		9.65 2.07 2.07	15.90 3.41 3.41

Table C.18—Continued

Promotion to O-6 Valve	Valve Value		Valves for Entry to O-6 Assignments	Valve Equation	Valve Value	
	Army	Air Force			Army	Air Force
O4n O52 to O6	0.00	0.00	to 4n 52 61 to 4n 52 62 to 4n 52 6n	0.33 * (O4n O52 to O6) 0.33 * (O4n O52 to O6) 0.33 * (O4n O52 to O6)	0.00 0.00 0.00	0.00 0.00 0.00
O4n O5n to O6	186.92	151.85	to 4n 5n 61	2 * {(O6 interagency and international positions/6) – (to 4n 5n 62) – [0.50 * (to 41 51 61)] – (to 41 51 62) – [0.50 * (to 41 5n 61)] – (to 41 5n 62) – [0.50 * (to 42 5n 61)] – (to 42 5n 62) – [0.50 * (to 4n 51 61)] – (to 4n 51 62)}		
			to 4n 5n 62	1	0.00	0.00
			to 4n 5n 6n	(O4n O5n to O6) – (to 4n 5n 61) – (to 4n 5n 62)	1.00	1.00
					185.92	150.85

Table C.19
O-6 Officer Assignments

Assignment Stock	Value of Stock (officers in the assignments)		Approximate Number of Interagency and International Assignments Possibly Filled	
	Army	Air Force	Army	Air Force
O41 O51 O61	1.00	2.84	1	1
O41 O51 O62	1.20	0.57	1	1
O41 O51 O6n	0.80	2.28	0	0
O41 O5n O61	4.88	13.94	2	7
O41 O5n O62	1.05	2.99	1	3
O41 O5n O6n	1.05	2.99	0	0
O42 O5n O61	0.13	0.37	0	0
O42 O5n O62	0.13	0.37	0	0
O42 O5n O6n	0.13	0.37	0	0
O4n O51 O61	57.87	95.38	29	48
O4n O51 O62	12.40	20.44	12	20
O4n O51 O6n	12.40	20.44	0	0
O4n O5n O61	0.00	0.00	0	0
O4n O5n O62	6.00	6.00	6	6
O4n O5n O6n	1,115.52	905.09	0	0
Total	1,221.76	1,074.07	52	86

Increasing the Total Number of Positions

Another possible excursion to this analysis is to increase the total number of interagency and international positions. It is important to remember that increasing the number of interagency and international positions does not increase the number of positions that each service must fill; these assignments already exist. Instead, increasing the number of interagency and international positions may place stresses upon the system if it is deemed important to fill the more senior interagency and international positions with officers who already have interagency and international experience, or to fill those positions with high-quality officers. Again, for the purposes of this model, high-quality officers are defined as those who are promoted at relatively high rates, who complete intermediate service school as residents, and who are selected for senior service college.

The total number of interagency and international positions for this excursion, and the division of these positions by service is shown in Table C.20. This excursion is based upon the discussion of a larger list of interagency and international positions in Section 2.

Table C.20
Assumed Interagency and International Positions by
Service (with Increased Number of Interagency and
International Positions)

	Army	Navy	Air Force	Marine Corps
Percentage of total	33	25	35	8
Number of positions	479	360	513	114

Additionally, the division of positions between grades was assumed similar to the division of acquisition positions for each of the services. The resulting assumptions about number of positions at each grade for each of the services are shown in Table C.21.

Based upon this number and distribution of positions, the movement of officers into O-4 interagency and international assignments is shown in Table C.22. The result of the increased number of positions is that considerably more officers are assigned to a single interagency and international position during their time as O-4s. Still, even with 1,466 interagency and international positions, the overwhelming majority of officers who attended intermediate service school as residents do not serve in interagency and international positions at the grade of O-4.

The effect of the increased numbers of interagency and international positions on promotion is shown in Table C.23. More individuals with interagency and international experience are promoted to O-5. This is an expected outcome and not surprising. Again, the increased number of interagency and international positions does not increase the number of positions to which officers are assigned, and does not increase the number of officers promoted. These positions already exist, and these officers are already being promoted, but more positions are recognized as interagency and international positions in this excursion.

Table C.21
Assumed Interagency and International Positions by Service and Grade
(with Increased Number of Interagency and International Positions)

Grade	Army Positions		Navy Positions		Air Force Positions		Marine Corps Positions	
	%	#	%	#	%	#	%	#
O-4	41	195	41	147	37	188	49	56
O-5	37	179	38	136	37	190	35	40
O-6	22	105	21	77	26	135	16	18
Total	100	479	100	360	100	513	100	114

Table C.22
Values for O-4 Assignment Valves (with Increased Number of Interagency and International Positions)

Valve	Equation	Valve Value		Resulting Stock Value	
		Army	Air Force	Army	Air Force
to O4 w 1	$0.90 * (\text{O4 interagency and international positions}/5) * 2$	70.20	67.68	351.00	338.40
to O4 w 2	$0.10 * (\text{O4 interagency and international positions}/5)$	3.90	3.76	19.50	18.80
to O4 w none	$(\text{O4 school}) - (\text{to O4 w 1}) - (\text{to O4_w_2}) - (\text{O4_loss})$	793.90	664.56	3,969.50	3,322.80

Table C.23
Values for Promotion Valves to O-5 (with Increased Number of Interagency and International Positions)

Valve	Equation	Valve Value	
		Army	Air Force
O41 to O5	$1.1 * (\text{O5 promo rate})$	46.25	46.90
O42 to O5	(O5 promo rate)	2.34	2.37
O4none to O5	$1.1 * (\text{O5 promo rate})$	523.10	460.54

Table C.24 indicates assignment to O-5 positions. For both services, the majority of officers who served in interagency and international positions at the grade of O-4 are not serving in the interagency and international community again at the grade of O-5. Were this assignment policy altered, they could increase the number of interagency- and international-experienced officers serving in O-5 interagency and international positions at any one time by a considerable amount for each service. This change in policy, however, would also reduce the number of officers with interagency and international experience at the grade of O-6.

Table C.25 indicates the assignment histories of officers filling interagency and international assignments at the grade of O-5.

As in the prior excursions, officers who have had more than two interagency and international assignments would not be considered competitive for selection to school or promotion, but those officers with a single interagency and international assignment would be considered especially competitive for school

selection and promotion. Table C.26 indicates that the majority of senior service college "seats" would be allocated to officers with interagency and international experience.

Table C.24
Movement into O-5 Assignments (with Increased Number of
Interagency and International Positions)

Valve	Equation	Valve Value	
		Army	Air Force
O41 to O51	$0.2 * (O41 \text{ to } O5)$	9.25	9.38
O41 to O52	$0.1 * (O41 \text{ to } O5)$	4.63	4.69
O41 to O5none	$0.7 * (O41 \text{ to } O5)$	32.38	32.83
O42 to O51	$0.1 * (O42 \text{ to } O5)$	0.23	0.24
O42 to O52	$0.1 * (O42 \text{ to } O5)$	0.23	0.24
O42 to O5none	$0.8 * (O42 \text{ to } O5)$	1.87	1.90
O4none to O51	$2 * \{(O5 \text{ interagency and international positions}/5) - [0.5 * (O42 \text{ to } O51)] - (O42 \text{ to } O52) - [0.5 * (O41 \text{ to } O51)] - (O41 \text{ to } O52) - (O4none \text{ to } O52)\}$	48.40	52.53
O4none to O52	2	2.00	2.00
O4none to O5none	$(O4none \text{ to } O5) - (O4none \text{ to } O51) - (O4none \text{ to } O52)$	472.70	406.01

Table C.25
O-5 Assignments and the Interagency and International Positions Filled
(with Increased Number of Interagency and International Positions)

Stock	Stock Value		Approximate Number of Interagency and International Positions Filled	
	Army	Air Force	Army	Air Force
O41 now O51	46.25	46.90	23	23
O41 now O52	23.13	23.45	23	23
O41 now O5none	161.89	164.16	0	0
O42 now O51	1.17	1.18	1	1
O42 now O52	1.17	1.18	1	1
O42 now O5none	9.34	9.48	0	0
O4none now O51	241.99	262.64	121	131
O4none now O52	10.00	10.00	10	10
O4none now O5none	2,363.52	2,030.06	0	0
Total			179	189

Table C.26
Selection for Senior Service College (with Increased Number of
Interagency and International Positions)

Valve	Valve Equation	Valve Value	
		Army	Air Force
O41 O51 to school	$0.20 * (\text{school seats})$	9.25	9.38
O41 O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O41 O5n to school	$0.20 * (\text{school seats})$	32.38	32.83
O42 O51 to school	$0.05 * (\text{school seats})$	0.23	0.24
O42 O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O42 O5n to school	$0.08 * (\text{school seats})$	1.87	1.90
O4n O51 to school	$\text{MIN}[0.90, \{(0.35 * \text{school seats}) / (\text{O4none now O51}/5)\}]$	43.56	47.28
O4n O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O4n O5n to school	$\text{MIN}[0.90, \{0.80 * (\text{remaining school seats}) / (\text{O4none now O5none}/5)\}]$	129.37	100.30

As Tables C.27 and C.28 indicate, the services can easily fill the interagency and international assignments at the grade of O-6 with officers who have previously acquired interagency and international experience. In fact, with the same moderate assignment policy as in the prior excursions, the Army and Air Force could fill 260 and 273 interagency- and international-designated positions, respectively, at the grade of O-6 with high-quality officers. This assignment policy would minimize the number of tours each officer spent in interagency and international assignments.

Table C.27
Movement of O-6 Officers into Assignments (with Increased Number of Interagency and International Positions)

Promotion to O-6 Valve	Valves for Entry to O-6		Valve Equation		Valve Value	
	Army	Air Force	Assignments		Army	Air Force
O41 O51 to O6	9.25	9.38	to 41 51 61 to 41 51 62 to 41 51 6n	0.50 * (O41 O51 to O6) 0.10 * (O41 O51 to O6) 0.40 * (O41 O51 to O6)	4.63 0.93 3.70	4.69 0.94 3.75
O41 O52 to O6	0.00	0.00	to 41 52 61 to 41 52 62 to 41 52 6n	0.33 * (O41 O52 to O6) 0.33 * (O41 O52 to O6) 0.33 * (O41 O52 to O6)	0.00 0.00 0.00	0.00 0.00 0.00
O41 O5n to O6	32.38	32.83	to 41 5n 61 to 41 5n 62 to 4n 5n 6n	0.70 * (O41 O5n to O6) 0.15 * (O41 O5n to O6) 0.15 * (O41 O5n to O6)	22.66 4.86 4.86	22.98 4.92 4.92
O42 O51 to O6	0.23	0.24	to 42 51 61 to 42 51 62 to 42 51 6n	0.33 * (O42 O51 to O6) 0.33 * (O42 O51 to O6) 0.33 * (O42 O51 to O6)	0.08 0.08 0.08	0.08 0.08 0.08
O42 O52 to O6	0.00	0.00	to 42 52 61 to 42 52 62 to 42 52 6n	0.33 * (O42 O52 to O6) 0.33 * (O42 O52 to O6) 0.33 * (O42 O52 to O6)	0.00 0.00 0.00	0.00 0.00 0.00
O42 O5n to O6	1.87	1.90	to 42 5n 61 to 42 5n 62 to 4n 5n 6n	0.33 * (O42 O5n to O6) 0.33 * (O42 O5n to O6) 0.33 * (O42 O5n to O6)	0.62 0.62 0.62	0.63 0.63 0.63
O4n O51 to O6	43.56	47.28	to 4n 51 61 to 4n 51 62 to 4n 51 6n	0.70 * (O4n O51 to O6) 0.15 * (O4n O51 to O6) 0.15 * (O4n O51 to O6)	30.49 6.52 6.52	33.09 7.09 7.09
O4n O52 to O6	0.00	0.00	to 4n 52 61 to 4n 52 62 to 4n 52 6n	0.33 * (O4n O52 to O6) 0.33 * (O4n O52 to O6) 0.33 * (O4n O52 to O6)	0.00 0.00 0.00	0.00 0.00 0.00

Table C.27—Continued

Promotion to O-6 Valve	Valves for Entry to O-6		Valve Equation		Valve Value	
	Army	Air Force	Army	Air Force	Army	Air Force
O4n O5n to O6	129.37	100.30	2 * ((O6 interagency and international positions/6) - (to 4n 5n 62) - [0.5 * (to 41 51 61)] - (to 41 51 62) - [0.5 * (to 41 5n 61)] - (to 41 5n 62) - [0.5 * (to 42 5n 61)] - (to 42 5n 62) - [0.5 * (to 4n 51 61)] - (to 4n 51 62))		0.00	0.00
			1		1.00	1.00
			(O4n O5n to O6) - (to 4n 5n 61) - (to 4n 5n 62)		128.37	99.30

Table C.28
O-6 Officer Assignments (with Increased Number of
Interagency and International Positions)

Assignment Stock	Value of Stock (officers in the assignments)		Approximate Number of Interagency and International Assignments Possibly Filled	
	Army	Air Force	Army	Air Force
O41 O51 O61	27.75	28.14	14	14
O41 O51 O62	5.55	5.63	6	6
O41 O51 O6n	22.20	22.51	0	0
O41 O5n O61	135.99	137.89	68	69
O41 O5n O62	29.14	29.55	29	30
O41 O5n O6n	29.14	29.55	0	0
O42 O51 O61	0.46	0.47	0	0
O42 O51 O62	0.46	0.47	0	0
O42 O51 O6n	0.46	0.47	0	0
O42 O5n O61	3.62	3.67	2	2
O42 O5n O62	3.62	3.67	4	4
O42 O5n O6n	3.62	3.67	0	0
O4n O51 O61	184.94	198.56	92	99
O4n O51 O62	39.20	42.55	39	43
O4n O51 O6n	39.20	42.55	0	0
O4n O5n O61	0.00	0.00	0	0
O4n O5n O62	6.00	6.00	6	6
O4n O5n O6n	770.21	595.83	0	0
Total			260	273

D. Managing Competencies Feasibility Model Description

Interagency and International Position Assumptions

This discussion explains the construction of the system dynamics model used to assess the feasibility and implications of the "managing competencies" career model. The graphic representation of that model is shown in Figure D.1.

The numbers of interagency and international assignments and the distribution of these assignments by service and by grade are the same as those used with the prior models, and they are shown again in Tables D.1 and D.2.

The model begins with the selection of new O-4s who will enter the career track. Those who are not selected pass back into the mainstream career progression. Once they have entered the career track, officers are either promoted to each successive grade or leave the service. The rectangular boxes represent the number of officers serving in interagency and international assignments at each grade. An officer selected to become an interagency and international O-4 either is promoted via "O5 promo" to "interagency and international O5s" or leaves the

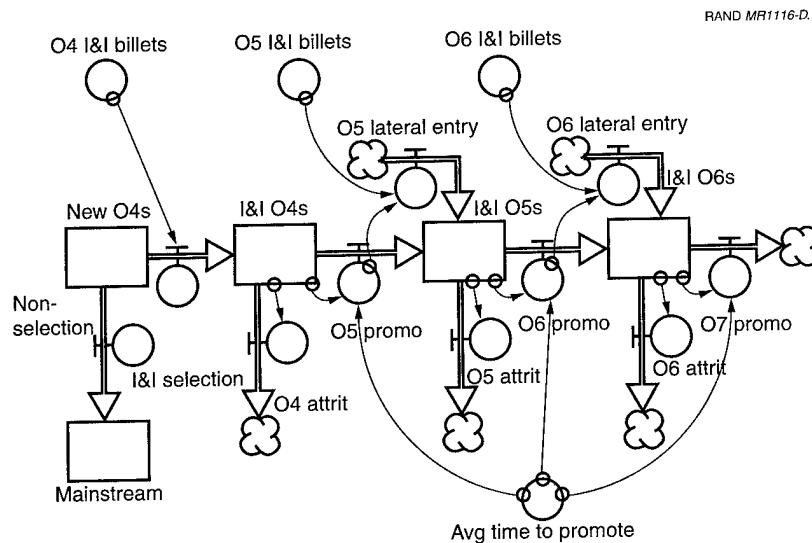


Figure D.1—The Managing Competencies Model

service via "O4 attrit." Additional officers may join the career track through "O5 lateral entry" when there are insufficient numbers of promoted officers within the career track to fill the O-5 interagency and international positions. The movement to the grade of O-6 is similar. This model does not track the rate of promotion to O-7, but represents that some percentage of officers who serve as "interagency and international O6s" will be promoted. The following discussion provides the equations and values the model components for each of the four services.

Table D.3 indicates the attrition rates used for each service from each grade. These rates are based on the FY 1997 service retention rates reported to the Secretary of Defense for the total service.

Table D.1
Assumed Interagency and International Positions by Service

	Army	Navy	Air Force	Marine Corps
Percentage of total	32	22	42	5
Number of positions	104	71	140	15

Table D.2
Assumed Interagency and International Positions by Service and Grade

Grade	Army Positions		Navy Positions		Air Force Positions		Marine Corps Positions	
	%	No.	%	No.	%	No.	%	No.
O-4	7	7	8	6	14	19	13	2
O-5	48	50	54	38	56	78	67	10
O-6	45	47	38	27	31	43	20	3
Total	100	104	100	71	100	140	100	15

Table D.3
Attrition Rates, "Managing Competencies" Model (%)

From Grade	Army	Air Force	Navy	Marine Corps
O-4	9.2	10.2	9.30	8.4
O-5	10.3	12.2	9.00	11.6
O-6	14.0	16.7	12.75	14.5

Table D.4 shows the promotion rates used in this model for each service. These promotion rates are based upon the FY 1997 rates reported for the acquisition community in each of the services. These rates were used because they reflect the promotion opportunity of a currently existing closed career track. The average time to promotion represents the time spent in grade, and is set to 6, so that one-sixth of the total officers in each of the grades is eligible for promotion each year.

The lateral entry valve at each grade is set to fill positions in the event that insufficient numbers of officers are promoted from within the system.

Table D.5 displays selected output of the model: the annual number of officers selected for O-4, the number promoted within the system to O-5 and O-6, the lateral entries to those grades, and the total number of officers serving in interagency and international assignments at each grade.¹

Table D.4
Promotion Rates, "Managing Competencies" Model (%)

To Grade	Army	Air Force	Navy	Marine Corps
O-5	62.5	68.9	72.6	73.9
O-6	31.7	32.1	56.2	35.7

Table D.5
"Managing Competencies" Model Output

	Army	Navy	Air Force	Marine Corps
O-4 Selectees	1.40	4.22	1.28	0.40
O-4 I&I	7.00	19.47	5.97	1.93
Promoted to O-5	0.75	2.24	0.72	0.24
Lateral to O-5	6.95	11.45	6.19	1.50
O-5 I&I	49.36	77.97	37.61	9.91
Promoted to O-6	2.61	4.17	3.52	0.59
Lateral to O-6	4.11	3.24	0.00	0.00
O-6 I&I	46.82	43.43	26.60	4.03

¹All model output values reported in this description are steady-state values.

Increasing the Total Number of Positions

Table D.6 provides the model output using the larger list of interagency and international assignments. The implications of this larger number of assignments for the "managing competency" model are discussed in Section 4. Note that the total number of officers at the grade of O-6 serving in interagency and international assignments considerably surpasses the number of such positions for the Navy, given the loss and promotion rates stated earlier.

Table D.6
"Managing Competencies" Model Output
(with Increased Number of Interagency and
International Assignments)

	Army	Navy	Air Force	Marine Corps
O-4 Selectees	38.09	40.89	31.55	11.67
O-4 I&I	194.14	188.48	147.4	56.31
Promoted to O-5	20.22	21.64	17.83	6.94
Lateral to O-5	7.75	11.69	6.98	0.02
O-5 I&I	179.40	189.91	135.08	39.62
Promoted to O-6	9.48	10.16	12.65	2.36
Lateral to O-6	5.74	12.92	0.00	0.64
O-6 I&I	106.19	135.19	94.89	20.48

E. Managing Skills Feasibility Model Description

Interagency and International Position Assumptions

This modeling explores the career flow implications of the “managing skills” model, given the 330 interagency and international positions discussed in Section 2. This model is similar in structure to the “managing leader succession” model discussed earlier in Appendix C. Although officers move back and forth between interagency and international and other assignments in both of these career models, the models differ in the perceived value of interagency and international assignments to an individual’s career and the amount of protection offered to those who serve in interagency and international positions.

The model components are the same as those in the “managing leader succession” model; only the equations and values within the model differ. Thus, this explanation will not include the graphic illustrations or the same amount of discussion. Instead, this description will focus on the tables of input and model output and will contrast these results with that of the earlier model.

Sector 1—Progression Through the Grade of O-4

Unlike the managing leader succession model, assignment to interagency and international positions is not limited to only the upper half of the year group. Thus, greater numbers of officers are included in this model, although the majority will not serve in interagency and international assignments.

Table E.1 indicates the values¹ of the valves and of the associated stock (“O4 with 1 interagency and international,” “O4 with 2 interagency and international,” and “O4 with no interagency and international) for the Army and Air Force examples. The stock values represent the total number of officers who will serve in interagency and international assignments while at the grade of O-4. However, the officers who serve in only one interagency and international assignment also serve in another assignment. Thus, only half of the 12.6 Army officers and the 34.20 Air Force officers in the first row of the table are serving in interagency and international assignments at any one time.

¹All model output values reported throughout this description are steady-state values.

Table E.2 indicates the promotion of these officers to the grade of O-5. The promotion rates used are shown in Table C.5. The equations for promotion to O-5 in this model range from the standard promotion rate to only 80 percent of the usual promotion rate for those officers who have served in two interagency and international assignments. In the managing leader succession model, the promotion rates for these officers ranged from the average rate to 110 percent of the average. As shown in Table E.2, this model promotes those with interagency and international experience at slightly below the board average.

Table E.3 indicates the movement of officers into O-5 assignments. Because only small numbers of officers serve in interagency and international assignments at the grade of O-4, the movement into O-5 assignments does not differ much between the models; in both, the majority of officers serving in O-5 interagency and international assignments are new to the experience.

This is also evident in Table E.4, which indicates the experience of the officers who fill the O-5 interagency and international assignments. Most of the officers

Table E.1
Values for O-4 Assignment Valves, "Managing Skills" Model

Valve	Equation	Valve Value		Resulting Stock Value	
		Army	Air Force	Army	Air Force
to O4 w 1	$0.90 * (\text{O4 interagency and international positions}/5) * 2$	2.52	6.84	12.6	34.20
to O4 w 2	$0.10 * (\text{O4 interagency and international positions}/5)$	0.14	0.38	0.7	1.90
to O4 w none	(O4 school) – (to O4 w 1) – (to O4_w_2) – (O4_loss)	1,396.34	1,991.78	4,226.70	9,958.90

Table E.2
Values for Promotion Valves to O-5, "Managing Skills" Model

Valve	Equation	Valve Value	
		Army	Air Force
O41 to O5	$0.9 * (\text{O5 promo rate})$	1.36	3.88
O42 to O5	$0.8 * (\text{O5 promo rate})$	0.07	0.19
O4none to O5	O5 promo rate	836.41	1,254.82

Table E.3
Movement into O-5 Assignments, "Managing Skills" Model

Valve	Equation	Valve Value	
		Army	Air Force
O41 to O51	$0.2 * (O41 \text{ to } O5)$	0.27	0.78
O41 to O52	$0.1 * (O41 \text{ to } O5)$	0.14	0.39
O41 to O5none	$0.7 * (O41 \text{ to } O5)$	0.95	2.71
O42 to O51	$0.1 * (O42 \text{ to } O5)$	0.01	0.02
O42 to O52	$0.1 * (O42 \text{ to } O5)$	0.01	0.02
O42 to O5none	$0.8 * (O42 \text{ to } O5)$	0.05	0.15
O4none to O51	$2 * \{(O5 \text{ interagency and international positions}/5)$ $- [0.5 * (O42 \text{ to } O51)]$ $- (O42 \text{ to } O52)$ $- [0.5 * (O41 \text{ to } O51)]$ $- (O41 \text{ to } O52)$ $- (O4none \text{ to } O52)\}$	15.44	25.59
O4none to O52	2	2.00	2.00
O4none to O5none	$(O4none \text{ to } O5)$ $- (O4none \text{ to } O51)$ $- (O4none \text{ to } O52)$	818.97	1,227.23

in Table E.4 who fill interagency and international assignments are "O4none now O51" (they will serve a single interagency and international assignment at the grade of O-5 without prior interagency and international experiences) or "O4none now O52" (those officers without prior interagency and international experience who will serve in two interagency and international assignments at the grade of O-5).

Table E.5 shows that few officers with interagency and international experience are selected for the senior service colleges. Although the proportion of school seats dedicated to these officers is considerably smaller than in the "managing leader succession" model (See Table C.17), the numbers of officers selected do not decline proportionally because there were not sufficient officers with interagency and international experience to fill the seats in the prior model. Even so, considerably fewer officers with interagency and international experience are promoted to O-6 in this "managing skills" career track.

Table E.6 indicates the assignment patterns of officers promoted to O-6. The segments of the O-6 portion of the model with zero or minimal values are considered "dead" and will not be discussed further.

Table E.4
O-5 Assignments and the Interagency and International Positions
Filled, "Managing Skills" Model

Stock	Stock Value		Approximate Number of Interagency and International Positions Filled	
	Army	Air Force	Army	Air Force
O41 now O51	1.36	3.88	1	2
O41 now O52	0.68	1.94	1	2
O41 now O5none	4.75	13.57	0	0
O42 now O51	0.03	0.10	0	0
O42 now O52	0.03	0.10	0	0
O42 now O5none	0.27	0.77	0	0
O4none now O51	77.18	127.96	39	64
O4none now O52	10.00	10.00	10	10
O4none now O5none	4,094.86	6,136.15	0	0
Total			51	78

Table E.5
Selection for Senior Service College, "Managing Skills" Model

Valve	Valve Equation	Valve Value	
		Army	Air Force
O41 O51 to school	$0.01 * (\text{school seats})$	0.27	0.78
O41 O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O41 O5n to school	$0.02 * (\text{school seats})$	0.95	2.71
O42 O51 to school	$0.00 * (\text{school seats})$	0.00	0.00
O42 O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O42 O5n to school	$0.00 * (\text{school seats})$	0.00	0.00
O4n O51 to school	$\text{MIN}[0.90, \{(0.35 * \text{school seats}) / (\text{O4none now O51} / 5)\}]$	7.47	6.51
O4n O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O4n O5n to school	$\text{MIN}[0.90, \{0.8 * (\text{remaining school seats}) / (\text{O4none now O5none} / 5)\}]$	240.31	207.00

Table E.6
Movement of O-6 Officers into Assignments, "Managing Skills" Model

Promotion to O-6 Valve	Valve Value		Valves for Entry to O-6 Assignments	Valve Equation		Valve Value	
	Army	Air Force				Army	Air Force
O41 O51 to O6	0.27	0.78	to 41 51 61	0.50 * (O41 O51 to O6)		0.14	0.39
			to 41 51 62	0.10 * (O41 O51 to O6)		0.03	0.08
			to 41 51 6n	0.40 * (O41 O51 to O6)		0.11	0.31
O41 O52 to O6	0.00	0.00	to 41 52 61	0.33 * (O41 O52 to O6)		0.00	0.00
			to 41 52 62	0.33 * (O41 O52 to O6)		0.00	0.00
			to 41 52 6n	0.33 * (O41 O52 to O6)		0.00	0.00
O41 O5n to O6	0.95	2.71	to 41 5n 61	0.70 * (O41 O5n to O6)		0.67	1.90
			to 41 5n 62	0.15 * (O41 O5n to O6)		0.14	0.41
			to 4n 5n 6n	0.15 * (O41 O5n to O6)		0.14	0.41
O42 O51 to O6	0.00	0.00	to 42 51 61	0.33 * (O42 O51 to O)		0.00	0.00
			to 42 51 62	0.33 * (O42 O51 to O)		0.00	0.00
			to 42 51 6n	0.33 * (O42 O51 to O)		0.00	0.00
O42 O52 to O6	0.00	0.00	to 42 52 61	0.33 * (O42 O52 to O6)		0.00	0.00
			to 42 52 62	0.33 * (O42 O52 to O6)		0.00	0.00
			to 42 52 6n	0.33 * (O42 O52 to O6)		0.00	0.00
O42 O5n to O6	0.00	0.00	to 42 5n 61	0.33 * (O42 O5n to O6)		0.00	0.00
			to 42 5n 62	0.33 * (O42 O5n to O6)		0.00	0.00
			to 42 5n 6n	0.33 * (O42 O5n to O6)		0.00	0.00
O4n O51 to O6	7.47	6.51	to 4n 51 61	0.70 * (O4n O51 to O6)		5.23	4.56
			to 4n 51 62	0.15 * (O4n O51 to O6)		1.12	0.98
			to 4n 51 6n	0.15 * (O4n O51 to O6)		1.12	0.98

Table E.6—Continued

Promotion to O-6 Valve	Valve Value		Valves for Entry to O-6 Assignments	Valve Equation	Valve Value	
	Army	Air Force			Army	Air Force
O4n O52 to O6	0.00	0.00	to 4n 52 61 to 4n 52 62 to 4n 52 6n	0.33 * (O4n O52 to O6) 0.33 * (O4n O52 to O6) 0.33 * (O4n O52 to O6)	0.00 0.00 0.00	0.00 0.00 0.00
O4n O5n to O6	240.31	207.00	to 4n 5n 61	2 * [(O6 interagency and international positions/6) - (to 4n 5n 62) - [0.5 * (to 41 51 61)] - (to 41 51 62) - [0.5 * (to 41 5n 61)] - (to 41 5n 62) - [0.5 * (to 42 5n 61)] - (to 42 5n 62) - [0.5 * (to 4n 51 61)] - (to 4n 51 62)]	5.06 1.00	2.57 1.00
			to 4n 5n 62 to 4n 5n 6n	1 (O4n O5n to O6) - (to 4n 5n 61) - (to 4n 5n 62)	234.25	203.43

Table E.7 indicates the values of the assignment stocks in the O-6 portion of the model or the numbers of officers at the grade of O-6 with each variation of assignment history. The purpose of this part of the model is to explore how many officers could be assigned to interagency and international positions with a relatively conservative assignment policy. In other words, many of those who served in interagency and international positions at earlier grades are not assigned to interagency and international again at the grade of O-6.

Increasing the Total Number of Positions

As with the other models, the sensitivity excursion for an increased number of positions was run with 1,466 interagency and international positions, as identified earlier. The distribution of these positions is shown again in Tables E.8 and E.9.

The movement of officers into O-4 interagency and international assignments is shown in Table E.10. The result of the increased number of positions is that considerably more officers are assigned to a single interagency and international position during their time as O-4s. Still, even with 1,466 interagency and international positions, the overwhelming majority of officers do not serve in interagency and international positions at the grade of O-4.

Table E.7
O-6 Officer Assignments, "Managing Skills" Model

Assignment Stock	Value of Stock (officers in the assignments)		Approximate Number of Interagency and International Assignments Filled	
	Army	Air Force	Army	Air Force
O41 O51 O61	0.82	2.33	1	1
O41 O51 O62	0.16	0.47	0	0
O41 O51 O6n	0.65	1.86	0	0
O41 O5n O61	3.99	11.40	2	6
O41 O5n O62	0.86	2.44	1	2
O41 O5n O6n	0.86	2.44	0	0
O42 O5n O61	0.00	0.00	0	0
O42 O5n O62	0.00	0.00	0	0
O42 O5n O6n	0.00	0.00	0	0
O4n O51 O61	31.37	27.34	16	14
O4n O51 O62	6.72	5.86	7	6
O4n O51 O6n	6.72	5.86	0	0
O4n O5n O61	30.33	15.39	15	8
O4n O5n O62	6.00	6.00	6	6
O4n O5n O6n	1,405.51	1,220.60	0	0
Total			48	46

Table E.8

**Assumed Interagency and International Positions by Service (with
Increased Number of Interagency and International Positions)**

	Army	Navy	Air Force	Marine Corps
Percentage of total	33	25	35	8
Number of positions	479	360	513	114

Table E.9

**Assumed Interagency and International Positions by Service and Grade
(with Increased Number of Interagency and International Positions)**

Grade	Army Positions		Navy Positions		Air Force Positions		Marine Corps Positions	
	%	No.	%	No.	%	No.	%	No.
O-4	41	195	41	147	37	188	49	56
O-5	37	179	38	136	37	190	35	40
O-6	22	105	21	77	26	135	16	18
Total	100	479	100	360	100	513	100	114

Table E.10

**Values for O-4 Assignment Values (with Increased Number of Interagency and
International Positions), "Managing Skills" Model**

Valve	Equation	Valve Value		Resulting Stock Value	
		Army	Air Force	Army	Air Force
to O4 w 1	0.9 * (O4 interagency and international positions/5) * 2	70.20	67.68	351.00	338.40
to O4 w 2	0.10 * (O4 interagency and international positions/5)	3.90	3.76	19.50	18.80
to O4 w none	(O4 school) - (to O4 w 1) - (to O4_w_2) - (O4_loss)	1,324.90	1,927.56	6,624.50	9,637.80

The effect of the increased numbers of interagency and international positions on promotion are shown in Table E.11. More individuals with interagency and international experience are promoted to O-5. This is an expected outcome, and not surprising. Again, the increased number of interagency and international positions does not increase the number of positions to which officers are assigned or the number of officers promoted. These positions already exist and these officers are already being promoted, but more positions are recognized as

interagency and international positions in this excursion. Even so, those officers who serve in interagency and international assignments are promoted at a lower rate than are their peers without interagency and international experience.

Table E.12 indicates assignment to O-5 positions. The majority of officers who serve in interagency and international O-5 positions did not have any interagency and international experience at the grade O-4.

Table E.11

Values for Promotion Valves to O-5 (with Increased Number of Interagency and International Positions), "Managing Skills" Model

Valve	Equation	Valve Value	
		Army	Air Force
O41 to O5	$0.9 * (\text{O5 Promo rate})$	37.84	38.37
O42 to O5	$0.8 * (\text{O5 Promo rate})$	1.87	1.90
O4none to O5	O5 Promo rate	793.62	1,214.36

Table E.12

Movement into O-5 Assignments (with Increased Number of Interagency and International Positions), "Managing Skills" Model

Valve	Equation	Valve Value	
		Army	Air Force
O41 to O51	$0.2 * (\text{O41 to O5})$	7.57	7.67
O41 to O52	$0.1 * (\text{O41 to O5})$	3.78	3.84
O41 to O5none	$0.7 * (\text{O41 to O5})$	26.49	26.86
O42 to O51	$0.1 * (\text{O42 to O5})$	0.19	0.19
O42 to O52	$0.1 * (\text{O42 to O5})$	0.19	0.19
O42 to O5none	$0.8 * (\text{O42 to O5})$	1.5	1.52
O4none to O51	$2 * \{(\text{O5 interagency and international positions}/5)$ $- [0.5 * (\text{O42 to O51})]$ $- (\text{O42 to O52})$ $- [0.5 * (\text{O41 to O51})]$ $- (\text{O41 to O52})$ $- (\text{O4none to O52})\}$	51.9	56.08
O4none to O52	2	2.00	2.00
O4none to O5none	(O4none to O5) $- (\text{O4none to O51})$ $- (\text{O4none to O52})$	739.71	1,156.28

Table E.13 indicates the experience patterns of officers who serve in O-5 interagency and international assignments. One hundred forty of the 179 Army positions, and 150 of the 189 Air Force positions are filled by officers without interagency and international prior experience. This is partly because of the lower promotion rates for officers with O-4 interagency and international experience, but largely because of the distribution of positions amongst the grades; there are more Air Force O-5 interagency and international positions than Air Force O-4 interagency and international positions.

Table E.14 indicates selection to senior service college. Most of the officers with interagency and international experience are not selected. Of those who are, most had only a single interagency and international assignment, although a small number had a single interagency and international assignment at both the grade of O-4 and the grade of O-5. The negative effect of interagency and international assignments on an officer's career progression can be seen in this table.

Tables E.15 and E.16 indicate the assignment of officers into O-6 interagency and international positions, and the assignment histories of officers in interagency and international assignments. Once again, the negative effect of interagency and international experience is evident in Table E.15, given the number of assignment histories that are not promoted to O-6. Most of the interagency and international assignments at the grade of O-6 can be filled with officers who have had prior interagency and international experience. The Army can easily fill all 105 of O-6 positions with such officers even given the conservative assignment policies shown in the valve equations in Table E.15. Because the Air Force has a larger number of O-6 interagency and international positions, the Air Force must assign more officers to O-6 interagency and international assignments without prior experience, but 117 of the total 135 interagency and international positions can be filled with officers who possess prior interagency and international experience.

Table E.13

**O-5 Assignments and the Interagency and International Positions
Filled (with Increased Number of Interagency and International
Positions), "Managing Skills" Model**

Stock	Stock Value		Approximate Number of Interagency and International Positions Filled	
	Army	Air Force	Army	Air Force
O41 now O51	37.84	38.37	19	19
O41 now O52	18.92	19.19	19	19
O41 now O5none	132.46	134.31	0	0
O42 now O51	0.93	0.95	0	0
O42 now O52	0.93	0.95	1	1
O42 now O5none	7.48	7.58	0	0
O4none now O51	259.51	280.41	130	140
O4none now O52	10.00	10.00	10	10
O4none now O5none	3,698.57	5,781.41	0	0
Total			179	189

Table E.14

**Selection for Senior Service College (with Increased Number of
Interagency and International Positions), "Managing Skills" Model**

Valve	Valve Equation	Valve Value	
		Army	Air Force
O41 O51 to school	$0.01 * (\text{school seats})$	7.57	7.67
O41 O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O41 O5n to school	$0.02 * (\text{school seats})$	26.49	26.86
O42 O51 to school	$0.00 * (\text{school seats})$	0.00	0.00
O42 O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O42 O5n to school	$0.00 * (\text{school seats})$	0.00	0.00
O4n O51 to school	$\text{MIN}[0.90, \{(0.35 * \text{school seats}) / (\text{O4none now O51} / 5)\}]$	7.47	6.51
O4n O52 to school	$0.00 * (\text{school seats})$	0.00	0.00
O4n O5n to school	$\text{MIN}[0.90, \{\text{remaining school seats} / (\text{O4none now O5none} / 5)\}]$	207.86	175.95

Table E.15
Movement of O-6 Officers into Assignments (with Increased Number of Interagency and International Positions), "Managing Skills" Model

Promotion to O-6 Valve	Valve Value		Valves for Entry to O-6 Assignments		Valve Equation		Valve Value	
	Army	Air Force					Army	Air Force
O41 O51 to O6	7.57	7.67	to 41 51 61		0.50 * (O41 O51 to O6)		3.78	3.84
			to 41 51 62		0.10 * (O41 O51 to O6)		0.76	4.60
			to 41 51 6n		0.40 * (O41 O51 to O6)		3.03	3.07
O41 O52 to O6	0.00	0.00	to 41 52 61		0.33 * (O41 O52 to O6)		0.00	0.00
			to 41 52 62		0.33 * (O41 O52 to O6)		0.00	0.00
			to 41 52 6n		0.33 * (O41 O52 to O6)		0.00	0.00
O41 O5n to O6	26.49	26.86	to 41 5n 61		0.70 * (O41 O5n to O6)		18.54	18.80
			to 41 5n 62		0.15 * (O41 O5n to O6)		3.97	4.03
			to 4n 5n 6n		0.15 * (O41 O5n to O6)		3.97	4.03
O42 O51 to O6	0.00	0.00	to 42 51 61		0.33 * (O42 O51 to O6)		0.00	0.00
			to 42 51 62		0.33 * (O42 O51 to O6)		0.00	0.00
			to 42 51 6n		0.33 * (O42 O51 to O6)		0.00	0.00
O42 O52 to O6	0.00	0.00	to 42 52 61		0.33 * (O42 O52 to O6)		0.00	0.00
			to 42 52 62		0.33 * (O42 O52 to O6)		0.00	0.00
			to 42 52 6n		0.33 * (O42 O52 to O6)		0.00	0.00
O42 O5n to O6	0.00	0.00	to 42 5n 61		0.33 * (O42 O5n to O6)		0.00	0.00
			to 42 5n 62		0.33 * (O42 O5n to O6)		0.00	0.00
			to 4n 5n 6n		0.33 * (O42 O5n to O6)		0.00	0.00
O4n O51 to O6	7.47	6.51	to 4n 51 61		0.70 * (O4n O51 to O6)		5.23	4.56
			to 4n 51 62		0.15 * (O4n O51 to O6)		1.12	0.98
			to 4n 51 6n		0.15 * (O4n O51 to O6)		1.12	0.98

Table E.15—Continued

Promotion to O-6 Valve	Valve Value		Valves for Entry to O-6 Assignments	Valve Equation		Valve Value	
	Army	Air Force				Army	Air Force
O4n O52 to O6	0.00	0.00	to 4n 52 61	0.33 * (O4n O52 to O6)		0.00	0.00
			to 4n 52 62	0.33 * (O4n O52 to O6)		0.00	0.00
			to 4n 52 6n	0.33 * (O4n O52 to O6)		0.00	0.00
O4n O5n to O6	207.47	175.95	to 4n 5n 61	2 * ((O6 interagency and international positions/6)			
				- (to 4n 5n 62) [0.5 * (to 41 51 61)]			
				- (to 41 51 62) [0.5 * (to 41 5n 61)]			
				- (to 41 5n 62) [0.5 * (to 42 5n 61)]			
				- (to 42 5n 62)			
				- [0.5 * (to 4n 51 61)]		0.00	4.26
				- (to 4n 51 62))		1.00	1.00
			to 4n 5n 62	1			
			to 4n 5n 6n	(O4n O5n to O6) - (to 4n 5n 61)			
				- (to 4n 5n 62)		206.47	170.70

Table E.16
O-6 Officer Assignments, "Managing Skills" Model

Assignment Stock	Value of Stock (officers in the assignments)		Approximate Number of Interagency and International Assignments Filled	
	Army	Air Force	Army	Air Force
O41 O51 O61	22.71	23.02	11	12
O41 O51 O62	4.54	4.60	5	5
O41 O51 O6n	18.17	18.42	0	0
O41 O5n O61	111.26	112.82	56	56
O41 O5n O62	23.84	24.18	24	24
O41 O5n O6n	23.84	24.18	0	0
O42 O51 O61	0.00	0.00	0	0
O42 O51 O62	0.00	0.00	0	0
O42 O51 O6n	0.00	0.00	0	0
O42 O5n O61	0.00	0.00	0	0
O42 O5n O62	0.00	0.00	0	0
O42 O5n O6n	0.00	0.00	0	0
O4n O51 O61	31.37	27.34	16	14
O4n O51 O62	6.72	5.86	7	6
O4n O51 O6n	6.72	5.86	0	0
O4n O5n O61	0.00	25.53	0	13
O4n O5n O62	6.00	6.00	6	6
O4n O5n O6n	1,241.16	1,024.19	0	0
Total			125	136

F. Description of Objectives and Components of Different Perspectives

In Section 5 of the report, we summarized the objectives (and the components that make up those objectives) sought by each of the three perspectives (individual officers, user organizations, and military services) that we used in the advisability analysis. This appendix describes, in detail, these objectives and their components.

Individual Officers

Individual officers strive to achieve a successful career. In the current culture, that means due-course promotion or better selection for key positions (for example, command), and stability in terms of career expectations and reduced uncertainty. To succeed, they seek training and career development that ensure they possess the capabilities to meet the needs of the positions to which they are assigned. They want an opportunity to contribute to a meaningful mission and to be part of a culture that exhibits values consistent with their own. They seek rewards commensurate with their performance. They want to be respected and treated with dignity. Officers increasingly are seeking a favorable work/life balance.

We believe the career model used can affect three objectives sought by individual officers: ability to contribute, security, and rewards.

Ability to Contribute

Career models differ significantly in their effect on an officer's ability to contribute to an organization's mission.

Amount of Preparation. A career model can affect an officer's ability to contribute most directly by how it prepares the officer through training, education and developmental assignments. A carefully structured, formal series of increasingly responsible assignments, preceded by the acquisition of the requisite knowledge, develops the skills needed to succeed. A career model that manages competencies or leader succession will tend to afford the most complete preparation for officers (including initial education, a well-delineated series of

assignments, continuing professional and/or military education); a career model that manages exceptions, the least.¹

Management Resources. Different career models require different amounts of resources for overseeing and managing the group. The greater the level of resourcing, the more likely the needs and desires of individual officers can be taken into account. The officers benefit from the advice and counsel provided in matters related to their careers; the greater the amount of guidance provided, the more likely the officer will be to contribute to the organization's mission. A career model that manages leader succession or competencies will tend to devote greater resources to management of these resources (for example, career field managers, specialized selection boards); a career model that manages exceptions, the least.

Sense of Membership. A career model can also create a sense of membership in a group; the strength of membership can enhance the potential for effective mentoring. A career model that focuses on managing competencies, for example, will help satisfy the contribution objective to a greater degree than one that manages exceptions. In fact, compared to a career model for managing generalists, one for managing the exception will tend to provide a lesser sense of belonging and membership.

Security

A career model can influence the officer's sense of security primarily in terms of the stability of a career field, the length of a career and the likelihood that an officer will be able to continue for the full length. A strong culture and high skill transferability also increase the sense of security.

Stability of Career Field. Although the military evolves relatively slowly, career fields can wax and wane depending on how well they support the larger organization's priorities.² Generally, the further removed a career field is from the main mission of a military department, the more at risk members managed within the context of a career model will be. Consequently, from the individual officer's perspective, a career model that manages skills will probably be considered less stable than one that manages generalists. A career model that

¹This appendix provides examples of how well different career models meet the objectives; the complete assessment is found in Table 5.1.

²For example, in the Army, officers developed in the organizational effectiveness functional area were held in high regard at one time; after a short period of ascendancy, that career field virtually disappeared (although there is some interest currently in reconsidering its value in today's environment).

manages leader succession will probably be considered the most stable because it is most closely integrated into the mainstream.³

Length of a Career. Career lengths in the military are a function of progression through the grades. The ability to progress to general officer, highest in a career model that manages leader succession, results in the longest potential career. Career models that manage skills tend to preclude officers in large numbers from being promoted beyond the grade of O-5 and therefore, limit career length.

Likelihood of Full Career. Although a career model may provide the possibility to rise to the top of the field grades, or even to general officer, the number of positions available may restrict the probability of that occurring. Career models can provide explicit protections that enhance the sense of security of the officers managed by it—for example, promotion floors or selection goals tied to other comparable groups. So although the length of a full career for an officer covered by a career model for managing competencies may not be different than for an officer covered by a career model for managing generalists, the likelihood of serving a full career in the former could be higher because of selection goals set at a higher rate than the average of those in the latter. Physicians are an example of this in today's environment.

Strength of Culture. Career models can also help to create a culture, language, and shared life experience that makes communication, learning, and growth easier. A strong culture tends to provide its members a sense of security. The culture is influenced by the amount of interaction among officers in the career model. Career models that manage competency (where officers are educated and assigned together) and, to a lesser degree, leader succession will tend to form a stronger culture than those that manage skills or exceptions.

Skill Transferability. Security can also be enhanced by the degree to which the skills and experience acquired by the officers managed are transferable to other (nonmilitary) organizations. We assume that interagency and international experience and education are transferable. A career model that is relatively unstable or provides a relatively short career length might still be favorable to the individual's security objective if post-career opportunities are readily available. A career model that focuses on managing competencies, for example, will help to satisfy the security objective to a greater degree than one that manages the

³It is important to keep in mind that the assessments in this section are to be viewed from the perspective of the individual officer. The career models being considered exist today and the officers are familiar with what they generally portend in terms of stability, career length, etc. The issue for the individual officers assigned to interagency and international positions is how they would view the application of each career model to their situation.

exception (because the transferable skills would be more highly developed in the former case).

Rewards

A career model can influence the possibility of rewards—monetary or nonmonetary.

Direct Pay. Monetary rewards include special and incentive pays. Career models that focus greater concern on the part of the organization regarding retention of a specifically managed resource (and consequent efforts to provide retention incentives) affect the likelihood of these pays. Although promotion has a direct impact on rewards, the impact of the likelihood of promotion on an officer's perspective of a career model is included under the dimension of security. A career model that manages competencies is more likely to provide direct rewards in the form of special pay than is any of the other career models.

Deferential Treatment. Rewards can also come in the form of more attractive assignments. These are key positions in which the officer receives substantial visibility and is afforded demanding challenges. A career model that manages leader succession is likely to be viewed most favorably along this dimension. Enhanced educational and developmental opportunities would be a reward, as well; however, this effect on an officer's perspective on career models is captured under the dimension of stability.

Respect. Members managed by a particular career model may receive greater visibility in the system. They are recognized as an important component of the whole—important enough to be managed separately. Their stature potentially increases. Clearly, a career model that manages leader succession provides officers substantial, positive feedback on their importance.

User Organization

The user organizations are where the broader national security perspective is most pronounced. The perspective of these organizations is reflected primarily in how the career models add value to the officers assigned to the organization—value that is needed to carry out the broad national security missions. In other words, these organizations are attempting to get the most qualified individuals in order to best carry out their respective missions. Three considerations are central to their assessment of the career models: contribution to mission, ability to control resources, and cost.

Contribution to Mission

Simply put, it is the officers' unique characteristics and resulting capabilities that are sought by the organizations and its leaders. Some of these characteristics are generic to all military officers; others are possessed only by specific officers. Different career models develop some of these characteristics more extensively or more widely. The benefits and costs are assessed largely in terms of the degree to which the officer possesses the desired characteristics and the proficiency with which the officer utilizes them. Several considerations help in assessing how well the career models satisfy the needs of the organization.

Standardization. Management of a group by a career model permits the organization to specify the general characteristics required by its members. The work produced by members of the group can be standardized through training or developmental assignments. This may be particularly important in the case of officers assigned to interagency and international positions. Other coordinating mechanisms—usually accomplished, in part, through organizational design (mutual adjustment, direct supervision, and standardization of output or standardization of process)—are either inappropriate or less effective for the kinds of activities carried out by these officers. Standardization of skills becomes the key to consistent results in a dynamic environment. The more structured the education and the more common the experience provided by a career model, the greater the likelihood that the output of the work performed will be standardized. A career model that manages competencies focuses most heavily on standardizing officer skills.

Specialization. Specialization is a means of adding value to an organization. To the degree that a career model develops a specialized capability needed by the organization to carry out its mission, it is more likely to be favored. For example, the publications describing military operations involving interagency and international organizations emphasize the importance of eliminating the walls that normally form between organizations—especially significantly different kinds of organizations. The officer must possess the ability to form and sustain—oftentimes in *ad hoc* and tense situations—relationships between the interagency or international organization and the organizations with which operations are conducted. A career model that manages competencies will develop greater specialization than a career model that manages the exception.

Knowledge of Military Operations. Interagency and international organizations seek military officers for a variety of reasons, but one of the most important is the officer's familiarity with military operations. In the process of developing specialization, current knowledge of military operations can be lost. For example,

because of the highly sequential nature of the developmental path for acquiring military expertise, repeated nonoperational assignments, regardless of the career model, limit current operational knowledge. The more senior an officer is when assigned to an interagency or international position, the more likely the officer will have acquired the requisite military knowledge. A career model that manages competencies (and to a lesser degree, one that manages skills) is the least likely to satisfy this component of the objective from the user's perspective.

Ability to See the Big Picture. Specialization can also work against an officer's ability to see the big picture—to take a strategic view. In the case of officers assigned to interagency and international positions, the ability to take a broader view appears particularly important. Effective operations require the alignment of individuals and organizations with diverse immediate objectives and fundamentally different views of the world. Career models can influence the officer's perspective through the type of education and the kinds and numbers of assignments. Generally, vertical career development—assignments in increasingly responsible positions of greater scope—leads to a broader perspective and the capacity to integrate diverse activities than does horizontal career development—assignments in career broadening positions at the same level. A career model that enhances specialization by managing competencies or skills will limit an officer's ability to see the big picture.

Ability to Control Resources

Organizations that value a resource desire to control its nature and availability. Career models provide the opportunity to varying degrees.

Monitoring Key Variables. The enabling factor for controlling a resource is the ability to monitor its status and to forecast how that status may change over time. A career model is one of the primary means of delineating and modeling the pool of officers available for assignment to interagency and international positions. It affects how quickly and effectively decisions can be implemented to change important variables (for example, numbers, characteristics, or qualifications) affecting this pool of officers. As the characteristics of the officers assigned to interagency and international positions become more critical to the success of the organizations, it becomes more important to monitor their characteristics more closely. Knowing who and where the officers are, their individual experience and the skills, and their availability is important in matching individual characteristics to needs in the most effective manner. Key assignments can be made more effectively when officers are managed as a group.

Ability to Influence Change. Monitoring a group of officers provides the opportunity to recognize emerging problems or changing requirements, analyze solutions, and direct action. At the most aggregate level, changes in the size of the pool or its distribution can signal selection or retention problems. At a more detailed level, variation in promotion opportunities may be cause for alarm. Changes in the nature or character of the work performed by these officers, changes in doctrine, or transference of lessons learned can be communicated through learning on the job or through more-structured formats, such as specified training or education. The career model is the means to respond to potential problems or changing requirements. Career models differ in how easily needed change can be identified and how effectively policy changes can be applied. A career model that manages exceptions affords the using organization relatively little opportunity to influence change; a career model that manages leader succession affords the greatest opportunity (primarily as a result of the intensive management underlying that career model).

Cost

Although there are some instances where an organization using military officers is required to reimburse the military department for the cost of the officers, this is not generally the case for officers assigned to interagency and international positions.⁴ However, different career models do impose other, nonfinancial costs on user organizations.

Management Resources. Less management attention is needed if the officer filling the position has acquired the characteristics needed before reporting to the organization. To the degree that on-the-job training is used to develop the skills of officers assigned to interagency and international positions, the organization must devote resources to that end. The lack of a fully qualified officer also means additional leadership oversight to monitor performance until the appropriate skill (and comfort) level has been achieved. A career model that manages competencies and skills will better prepare officers for immediate productivity.

⁴We did not formally investigate the advantages and disadvantages of requiring reimbursement for officers assigned outside of military departments. However, different career models do impose different costs on the services in terms of manpower devoted to managing a separate group, unique training and education provided to meet the needs of the using organizations, and the opportunity cost in the form of an officer's unavailability to fill a vacant authorization in the service structure. Because the organization using the officer avoids these costs, it may have the tendency to ask for more management, training, and officers than it would if these were not "free goods" from the organization's perspective. Of course, this "tragedy of the commons" is not unique to officers assigned to interagency and international positions; it applies to other positions outside of the military service—and to positions inside as well. As we will see, this is one reason that the perspective of the military service and that of the user organization diverge in their assessment of the different career models.

Communication/Coordination. Specialization may impose costs as well as benefits within the organization. Although specialization leads to greater expertise and ability to perform the tasks required, it tends to erect barriers within the organization. To the degree that perspectives, processes, and vocabulary are different and internalized in the officer, communication and coordination with the rest of the organization become more difficult. Specialization will nearly always have this effect; it can be overcome by a conscious attempt to vitiate the barriers. A career model that manages competencies or skills is designed specifically to develop specialized capabilities. But in the case at hand, specialization in interagency and international skills can make it more difficult to interact with the rest of the organization. Although the interagency and international activities may be important, even critical, to the user organization, they are just part of the many activities that the leadership must coordinate in order to accomplish the overall mission. The greater the specialization in interagency and international activities (and the more valuable the office in carrying out those activities), the more likely it will create communication and coordination barriers between the officers and the organization they serve, thus requiring management attention to assuage.⁵

Alignment with Mission. Organizing officers into functional groups (for example, by skills or competencies) can lead to a functional perspective that diverges from the larger objectives of the organization in which the officer serves. This is seen in the “stovepipes” found in more-mature organizations. A functional perspective can lead to individuals pursuing ends that are important to the function but not necessarily fully aligned with the goals of the rest of the organization of which the function is a part. In the case of officers assigned to interagency and international positions, the greater the officer’s focus on interagency and international issues, concepts, and objectives (a functional perspective), the less the broader perspective of the organization (and its mission) may be taken into account. This can be exacerbated by repeated or lengthy assignments to the same organization and the ties established with the leaders of an interagency or international organization that experiences less turnover. One of the sources we interviewed suggested that individuals assigned to the same interagency and international position for a lengthy period develop an ingrained perspective that may be counter to that of the organization’s leadership, making broader organizational goals more difficult to achieve. To the

⁵The officers who serve in joint duty positions are a case in point. Among their specialized capabilities are their individual-service operational skills. In the past, joint operations experienced considerable difficulties in communicating and coordinating activities. One of the purposes of the joint duty career model is to break down the communication and coordination barriers that arise from the service-specific specialization—which is exactly the capability that is so highly prized in the joint arena.

degree that the perspective of the function is congruent with the mission of the organization, this can be a benefit; it is more likely to be the case as the positions become more critical to the success of the organization. To the degree that there is a lack of congruence, management attention will be diverted from other tasks.

Military Services

The overriding objective of the military service is to be prepared to meet its specific mission. Its current officer career models are designed to accomplish that end within existing constraints. Certainly, the services view the activities of officers assigned to interagency and international positions as important contributions to their ability to carry out their missions. In this perspective, however, we chose to emphasize those considerations that center on the military service as a provider of the resources, leaving the broader national security considerations to those considered in the user perspective. Three considerations are central to the military services' assessment of career models (as the provider of the resources): contribution to service mission, ability to manage officer resources, and cost.

Contribution to Service Mission

Career models influence the contribution that officers make to service mission through the value of the specialized capabilities they develop, availability of the officer to meet service requirements, the alignment of officer perspectives with service missions, and flexibility to meet service needs.

Value of Specialization. The service could derive substantial value from the enhanced capabilities acquired through the education and experience provided to the officers assigned to interagency and international positions. Whether the service values this education and experience depends, in large part, on their view of how much it contributes to accomplishing the service mission. In other words, if the education and experience is applicable only to interagency and international organizations, the services are less likely to view positively a career model that provides it. On the other hand, if the education and experience is complementary to or provides a capability that has application to critical service needs, they are more likely to view the career model positively. Based on the interviews we conducted, we believe that the services (as the provider of the resources) generally do not value the specialization acquired by officers assigned to interagency and international positions.

Availability of Officers. If the service perceives value to the specialized education and experience, its perception of the career model will be influenced by whether the officer will be available to be assigned to positions within the military service where the officer's enhanced capabilities can be utilized. In addition, even if the specialization is not viewed as particularly valuable by the military service, different career models (because of the educational requirements or assignment patterns inherent in the model) will affect the availability of the officer to meet other service requirements. For example, a career model that manages competencies would generally require nearly all assignments after a specific point in the officer's career to be related to the officer's competencies. Employing such a career model for officers assigned to interagency and international positions would imply little availability of the officer for other service-specific assignment.

Alignment with the Mission. Some career models tend to emphasize an internal focus (on the function or specialty and its purpose) more than others do. This narrowing of focus can come at the expense of service perspective. Those career models that develop more-specialized officers (managing competencies and managing skills) will require greater management attention to ensure alignment is maintained.

Flexibility to Meet Needs. As missions change, the criticality of officers performing specific tasks may change. The type of career model can affect the service's ability to respond to the need for change. For example, career models that manage competencies and leader succession may become institutionalized and, consequently, more difficult to tailor to changing service needs. To the degree the services believe that interagency and international positions are less critical or may become less critical in the future, they will tend to value such models less favorably.

Resource Management

The services provide the systems and processes for managing officers. These reside primarily under the auspices of the personnel and training communities. The perspective of the personnel community regarding the advisability of the various career models relates to the following components: control of the resources, the ease with which the resource can be managed, and the effectiveness of management efforts to achieve the desired ends.

Control of Resources. Designating a group allows the services to monitor the amount of resources (number of officers, training funds, etc.) that are devoted to support of interagency and international positions. It is a step toward full cost

accounting that can be used to understand and explain the allocations of service resources, if not necessarily to affect the allocation. It can signal increasing demands on service resources by outside service claimants and lead to action to assess what otherwise might go unobserved through a series of marginal increases. It can also highlight the distribution of quality officers between key service positions and positions in interagency and international organizations. Career models that intensively manage officers within homogeneous groups will be more highly valued by the services.

Ease of Management. Identifying, managing and developing is easier for a group of officers managed under a career model that isolates them from the rest of the population. A well-defined set of positions, a logical progression through those positions, and common educational requirements at well-defined points in a career lead to standard procedures and practices. Career models in which heterogeneous groups of officers are mixed together and managed homogeneously are more difficult to manage. To the degree that a career model allows or requires officers to be "protected" (promotion floors or promotion opportunity goals) while intermixed with officers who make up the core of the military service, the core suffers. It reduces the service's flexibility in responding to its own needs. In this case, career models interact with each other primarily by limiting the options available to a service manager to carry out independent actions. Finally, a career field restricted to an individual service is easier to manage than one that is shared by the services.

Management Effectiveness. Designation of a group tends to lead to a crisper definition of the characteristics and attributes needed by the using organizations; these lead to better designed, more-focused, more-efficient programs for achieving the desired characteristics and attributes. Economies of scale and scope can be brought to bear on officers managed in the same way toward the same ends.

Cost

The cost of managing and training officers lies with the military services. This is a necessary expense of doing business. However, different career models require different amounts of managerial and training resources.

Management Overhead. The additional resources required to manage a career model for officers assigned to interagency and international positions vary depending on the model chosen. A career model that manages officers assigned to interagency and international positions as exceptions would have no appreciable fixed cost and, given the relatively small potential size of those

included in the career model, only a small variable cost. A career model that manages skills would incur some fixed cost, but not as much as a career model that manages competencies or leader succession.

Complexity. As career models proliferate, the complexity of managing officers increases. A career model that manages competencies can operate relatively autonomously after the point at which officers enter a single career model. On the other hand, to the degree that a career model imposes constraints on the operation of other career models (in terms of the availability of officers, required promotion floors, or consistent promotion opportunities) or that officers are managed by more than one career model, complexity increases.

Financial Costs. Training expenses could be the major difference between career models from the service perspective. Fixed costs could be avoided to the extent that education and training could be purchased from outside sources, changing the relative importance of this factor in the services' perceptions. Similarly, to the extent that training is accomplished on the job, the services would view the cost associated with a career model to be less than if that training needed to be provided in an institutionalized form.

G. Application of the Framework for Assessing Advisability

For each component of the objectives, we performed an ordinal (i.e., 1, 2, 3, 4) ranking of the career models. The assessment was made from the perspective of the category holding the objective. In Table G.1, "1" indicates the career model that meets the objectives of the specific perspective to the greatest extent; "4" indicates the career model that meets the objectives to the least extent.

These rankings are based on expressed views of people we interviewed, on accepted views about the impact of various career models on specific objectives, and on our experience. Recognizing that different readers may have different viewpoints, this framework allows for different rankings to be made and the results assessed.

To assess the overall ranking of career models from each perspective and to evaluate the effect of varying the priority given to each objective, we converted the ordinal rankings to rank-order centroids.¹

A rank-order centroid (ROC) is essentially an average; specifically a geometric average of a simplex's defining vertices calculated for each of the attributes in a rank-ordered set. To illustrate this concept, we will start with two attributes that have been rank-ordered. In this case, "A" is preferred over "B." A can range in value from a maximum of 1.0 to a minimum of 0.5; B can range from 0.5 to 0.0;² and the values sum to 1.0.³ In this case, A is evaluated along a straight line (1, 0.5) and has an average (ROC) value of 0.75; B has a ROC value of 0.25.

A more complex example of ROC occurs with three attributes (A preferred over B preferred over C). In this case, A is evaluated by a triangle formed by the three points (1, 0.5, and 0.33); B by the triangle (0, 0.5, and 0.33); and C by the "triangle" (0, 0, and 0.33). This represents and depicts the dependence between the attributes as well as the maximum and minimum ranges of values. Thus when A has a maximum value of 1, B and C must be 0. When B has a maximum value of 0.5, A must also be 0.5 and C must be 0. When C has a maximum value

¹We followed the methods outlined in Barron and Barrett (1996).

²If B could have value greater than 0.5 or if A could have value less than 0.5, then B would be preferred over A which is counter to our assumption.

³The weights are normalized.

Table G.1
Ranking of Career Models Against Objectives

RAND MR1116-G.1

	Career Models			
	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Individual Officer				
Ability to contribute				
Amount of preparation	2	1	3	4
Management resources	1	2	3	4
Sense of membership	2	1	2	4
Security				
Stability of career field	1	2	4	3
Length of career	1	2	3	3
Likelihood of full career	1	2	4	3
Strength of culture	2	1	3	4
Skill transferability	4	1	2	2
Rewards				
Direct pay	2	1	2	2
Deferential treatment	1	2	3	4
Respect	1	2	4	3
User Organization				
Contribution to mission				
Standardization	2	1	2	4
Specialization	2	1	3	4
Knowledge of military operations	1	4	3	2
Ability to see the big picture	1	2	3	4
Ability to control resources				
Monitoring key variables	2	1	3	4
Ability to influence change	1	2	3	3
Cost				
Management resources	3	1	1	3
Communication/coordination	1	3	4	1
Alignment with mission	2	4	3	1
Military Service				
Contribution to service mission				
Value of specialization	2	2	2	1
Availability of officer	3	4	2	1
Alignment with the mission	1	4	3	1
Flexibility to meet needs	3	4	2	1
Resource management				
Control of resources	2	1	3	4
Ease of management	3	2	1	4
Management effectiveness	4	1	2	3
Cost				
Management overhead	3	3	2	1
Complexity	4	1	2	3
Financial costs	4	3	2	1

of 0.33 then the others must also have the same value. For this example, the ROC value for A is 0.61;⁴ for B, 0.28; and for C, 0.11.

The ROC weight for each of the attributes in a rank-ordered group is displayed in Table G.2. Note that individual ROCs must sum to 1.0, i.e., these are normalized rankings.

⁴ROC for A equals $((1.0 + 0.5 + 0.33)/3) = (1.83)/3 = 0.61$; ROC for B = $(0.83)/3 = 0.28$; and ROC for C = $(0.33)/3 = 0.11$.

Table G.2
ROC Weights

Rank Order(<i>i</i>)	Number (<i>n</i>) of Rank-Ordered Attributes				
	<i>n</i> = 1	<i>n</i> = 2	<i>n</i> = 3	<i>n</i> = 4	<i>n</i> = 5
1	1.00	0.75	0.61	0.52	0.46
2		0.25	0.28	0.27	0.26
3			0.11	0.15	0.16
4				0.06	0.09
5					0.04

NOTE: For the *i*th most important attribute, the ROC weight is expressed by the formula:

$$w_i = \frac{1}{n} \sum_{j=i}^n \frac{1}{j}, \quad i = 1, \dots, n$$

Table G.3 reflects the normalization of the ranking using the above methodology and the results in the case of equal weights applied to each perspective, to each objective within a perspective, and to the components within objectives. Note that when we are indifferent between two rankings (e.g., ability to contribute and sense of membership), we simply average the relevant rankings. The weighted values for the "perspective totals" and for each of the perspectives can be turned back into rankings. This table is the basis for the summary results (Table 5.1) in Section 5. The next three appendices assess the impact of varying the weight on perspectives, objectives and components.

Table G.3
Weighting Perspectives and Objectives

RAND MR1116-G.3

	Weights			Career Models			
	Perspective Weight	Objective Weights	Component Weights	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Perspective Totals	100.0%			0.29	0.32	0.19	0.20
Individual Officer	33.3%	100.0%		0.37	0.39	0.14	0.11
Ability to contribute		33.3%	100.0%	0.33	0.44	0.17	0.06
Amount of preparation			33.3%	0.271	0.521	0.146	0.063
Management resources			33.3%	0.521	0.271	0.146	0.063
Sense of membership			33.3%	0.2085	0.521	0.2085	0.063
Security		33.3%	100.0%	0.38	0.37	0.12	0.13
Stability of career field			20.0%	0.521	0.271	0.063	0.146
Length of career			20.0%	0.521	0.271	0.1045	0.1045
Likelihood of full career			20.0%	0.521	0.271	0.063	0.146
Strength of culture			20.0%	0.271	0.521	0.146	0.063
Skill transferability			20.0%	0.063	0.521	0.2085	0.2085
Rewards		33.3%	100.0%	0.40	0.35	0.12	0.12
Direct pay			33.3%	0.15967	0.521	0.15967	0.15967
Deferential treatment			33.3%	0.521	0.271	0.146	0.063
Respect			33.3%	0.521	0.271	0.063	0.146
User Organization	33.3%	100.0%		0.34	0.31	0.16	0.18
Contribution to mission		33.3%	100.0%	0.38	0.34	0.16	0.12
Standardization			25.0%	0.2085	0.521	0.2085	0.063
Specialization			25.0%	0.271	0.521	0.146	0.063
Knowledge of military operations			25.0%	0.521	0.063	0.146	0.271
Ability to see the big picture			25.0%	0.521	0.271	0.146	0.063
Ability to control resources		33.3%	100.0%	0.40	0.40	0.13	0.08
Monitoring key variables			50.0%	0.271	0.521	0.146	0.063
Ability to influence change			50.0%	0.521	0.271	0.1045	0.1045
Cost		33.3%	100.0%	0.26	0.20	0.20	0.34
Management resources			33.3%	0.1045	0.396	0.396	0.1045
Communication/coordination			33.3%	0.396	0.146	0.063	0.396
Alignment with mission			33.3%	0.271	0.063	0.146	0.521
Military Service	33.3%	100.0%		0.15	0.26	0.27	0.33
Contribution to service mission		33.3%	100.0%	0.21	0.09	0.21	0.49
Value of specialization			25.0%	0.15967	0.15967	0.15967	0.521
Availability of officer			25.0%	0.146	0.063	0.271	0.521
Alignment with the mission			25.0%	0.396	0.063	0.146	0.396
Flexibility to meet needs			25.0%	0.146	0.063	0.271	0.521
Resource management		33.3%	100.0%	0.16	0.44	0.31	0.09
Control of resources			33.3%	0.271	0.521	0.146	0.063
Ease of management			33.3%	0.146	0.271	0.521	0.063
Management effectiveness			33.3%	0.063	0.521	0.271	0.146
Cost		33.3%	100.0%	0.08	0.26	0.27	0.40
Management overhead			33.3%	0.1045	0.1045	0.271	0.521
Complexity			33.3%	0.063	0.521	0.271	0.146
Financial costs			33.3%	0.063	0.146	0.271	0.521

H. Prioritizing Perspectives

In this appendix, we investigate the effect of changing priorities among the various perspectives. Here we weight the objectives within each of the perspectives and the components within each objective equally. We use a series of two-dimensional graphs to depict the effect of the priorities (weights) of the three perspectives. For example, in Figure H.1, the individual officer's perspective is weighted at 0 percent. The graph portrays the effect of changing the priority of the user organization from 100 percent to 0 percent (and consequently, the effect of changing the priority of the military service from 0 percent to 100 percent). In Figure H.2, the individual officer's perspective is weighted at 20 percent (leaving 80 percent to be split between the priority given the user organization and the military service). And so forth (Figures H.3–H.5).

From the left-hand side of Figure H.1, we see that if consideration is given only to the user organization (i.e., the perspectives of the individual officer and the military service are weighted at 0 percent), the preferred career model is managing leader succession, because it better meets the objective from the user's perspective. From the right-hand side, we see that if consideration is given only to the military service (i.e., the perspectives of the individual officer and the user organization are weighted at 0 percent), the preferred career model is managing the exception followed by managing skills, because these career models best meet the military services' perspective. From Figure H.5, we see that if the major consideration is given to the individual officer (i.e., the perspectives of the user organization and the military service are weighted at near zero), the preferred career model is managing competencies followed by managing leader succession, because these career models best meet the individual officer's perspective.

We also note from Figures H.1 and H.2 (reflecting a relatively low priority for the individual officer's perspective) that if equal priority is given to the perspectives of the user organization and the military services, no one career model is preferred, because different career models satisfy objectives that are important to each perspective. As the individual officer's perspective is given greater priority, managing leader succession and managing competencies emerge as the preferred career models.

We also investigated the effect of changing priorities among the various objectives within the three different perspectives (individual officers, user

organizations, military services). The results of this analysis are summarized in Appendix I. Finally, we investigated the effect of changing the priorities of the components within the objectives sought by each of the three perspectives. The results of this analysis are summarized in Appendix J.

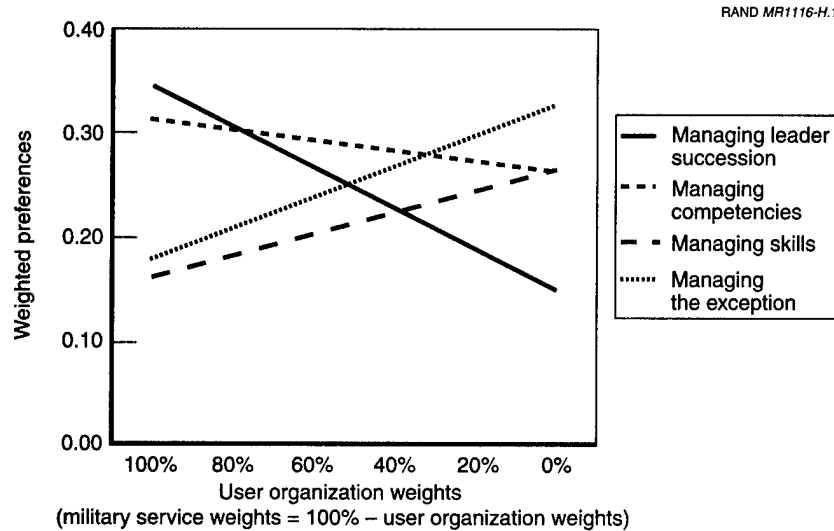


Figure H.1—Individual Officer Weighted at 0 Percent; Other Perspectives Vary

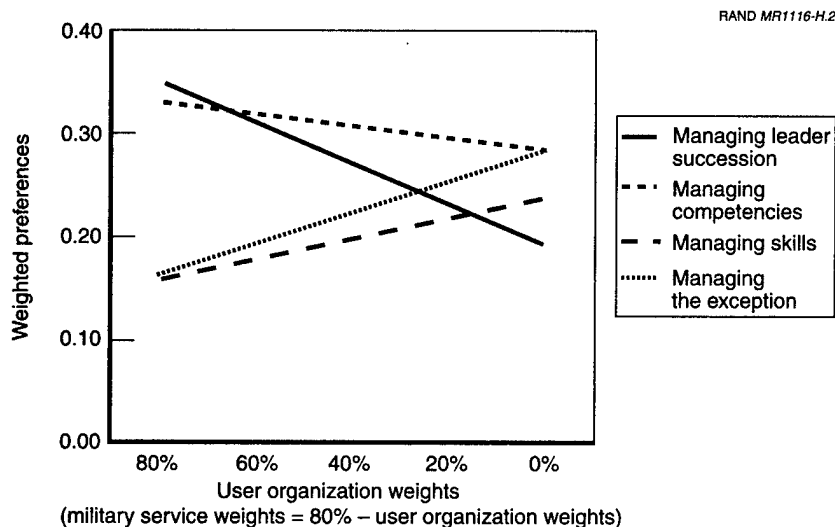


Figure H.2—Individual Officer Weighted at 20 Percent; Other Perspectives Vary

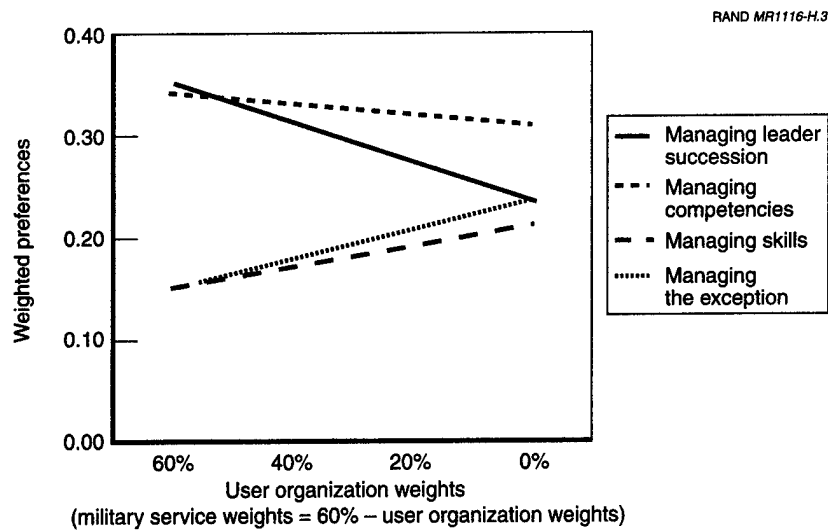


Figure H.3—Individual Officer Weighted at 40 Percent; Other Perspectives Vary

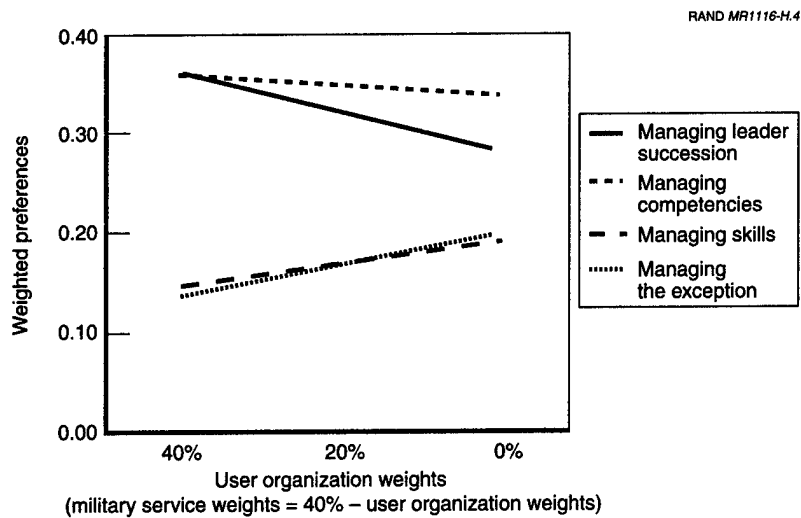


Figure H.4—Individual Officer Weighted at 60 Percent; Other Perspectives Vary

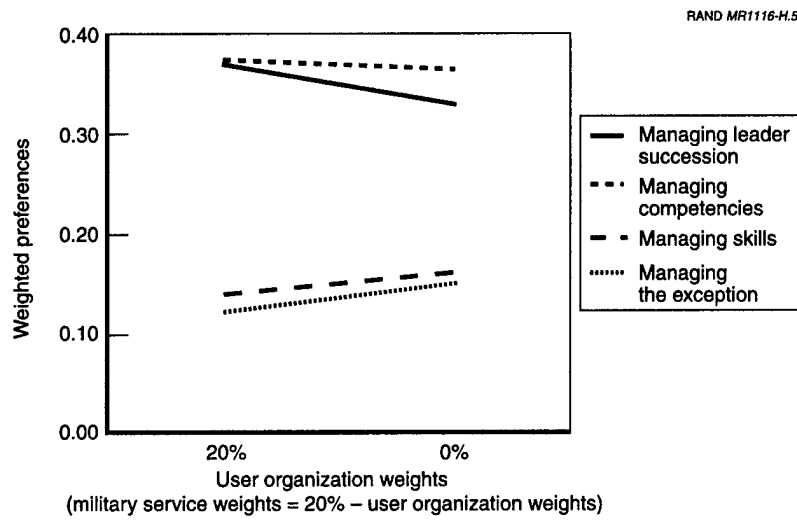


Figure H.5—Individual Officer Weighted at 80 Percent; Other Perspectives Vary

I. Prioritizing Objectives

In this appendix, we investigate the effect of changing priorities among the various objectives within the three different perspectives (individual officers, user organizations, military services). Here we weighted the components within each objective equally.

Objectives for Individual Officers

Figures I.1–I.3 show the effect of changing the priorities of the three major objectives individual officers seek: ability to contribute, security, and rewards. Managing competencies and managing leader succession are the preferred career models. Managing leader succession is the preferred career model when the rewards objective is given greater weight; managing competencies is the preferred career model as security and/or ability to contribute are weighted more highly.

Objectives for User Organizations

Figures I.4–I.6 show the effect of changing the priorities of the three major objectives that user organizations seek: contribution to mission, ability to control resources, and cost. If contribution to mission has any weight at all, managing leader succession is the preferred career model; the preference of the user organization for managing leader succession becomes more pronounced as the priority of the contribution to mission objective increases. If cost is the overriding objective (i.e., the other objectives are weighted at near zero), managing the exception becomes the preferred career model; if ability to control resources is the overriding objective, managing competencies vies with managing leader succession as the preferred career model.

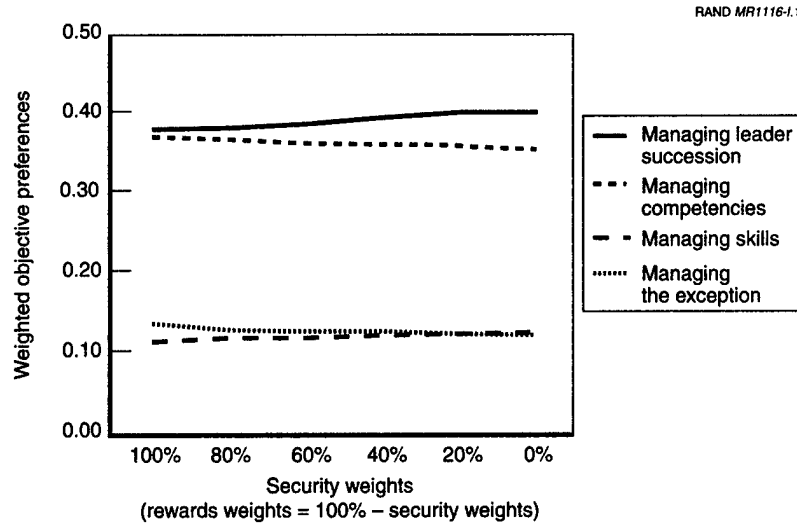


Figure I.1—Ability to Contribute Weighted at 0 Percent; Other Objectives Vary

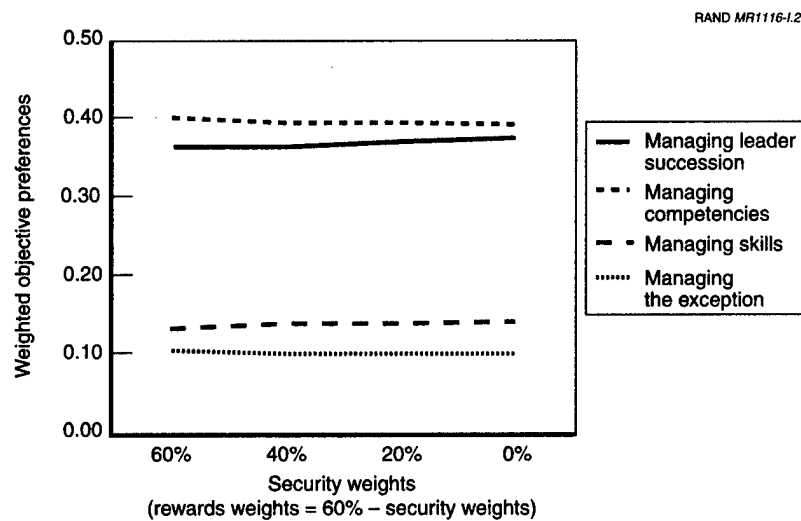


Figure I.2—Ability to Contribute Weighted at 40 Percent; Other Objectives Vary

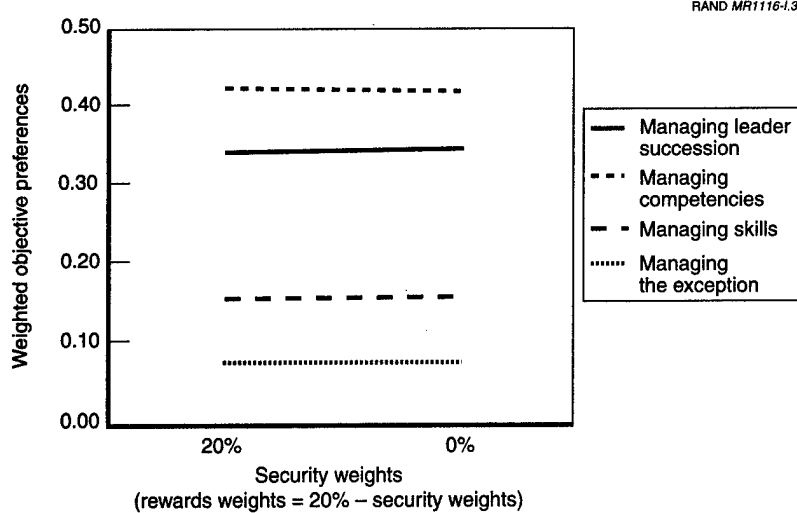


Figure I.3—Ability to Contribute Weighted at 80 Percent; Other Objectives Vary

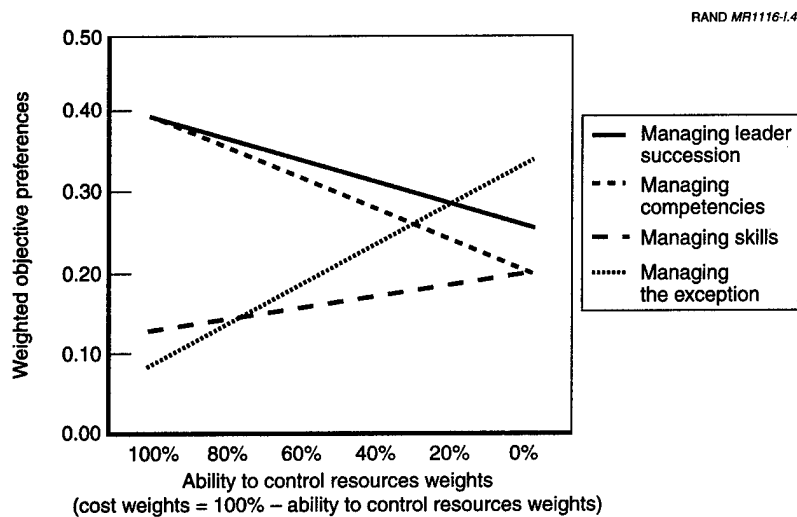


Figure I.4—Contribution to Mission Weighted at 0 Percent; Other Objectives Vary

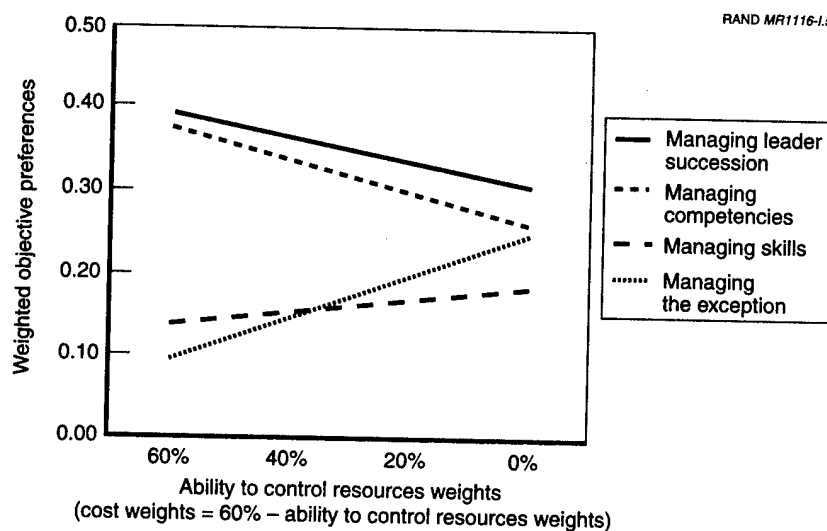


Figure I.5—Contribution to Mission Weighted at 40 Percent; Other Objectives Vary

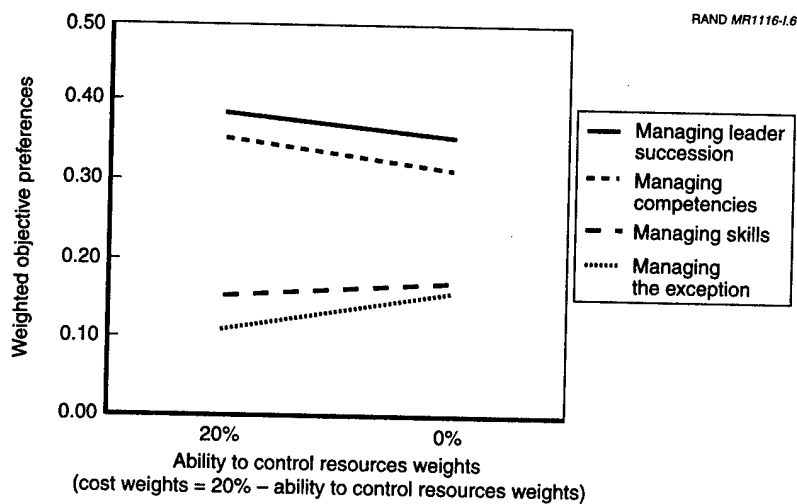
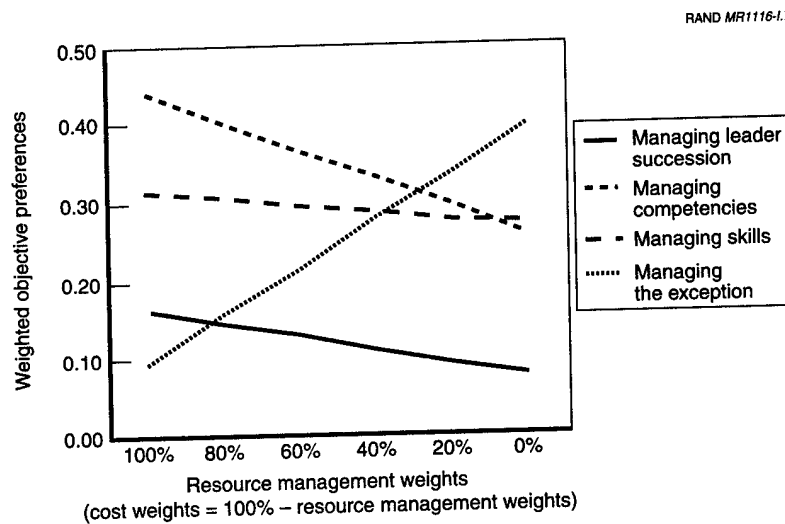


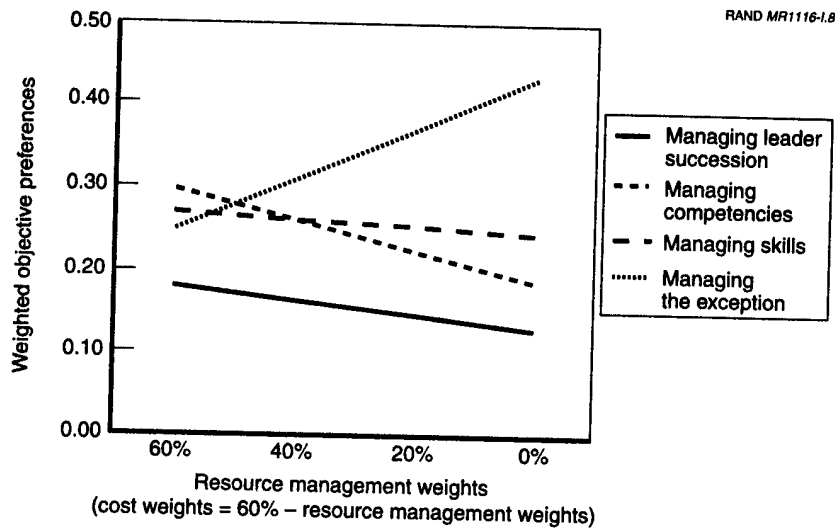
Figure I.6—Contribution to Mission Weighted at 80 Percent; Other Objectives Vary

Objectives for Military Services

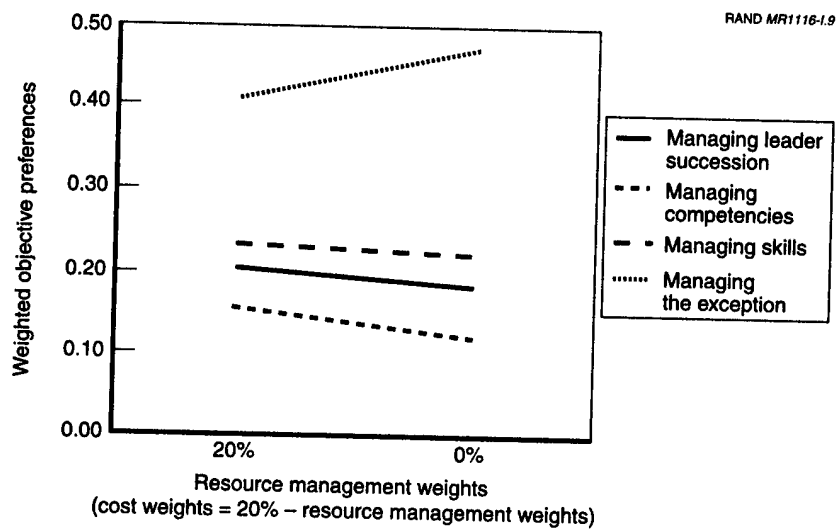
Figures I.7–I.9 show the effect of changing the priorities of the three major objectives the military services seek: contribution to service mission, resource management, and cost. Managing competencies is the preferred career model when contribution to service mission is given less weight. That preference is greatest when resource management is given the highest weight. As the priority of the contribution to service mission increases, managing the exception becomes the preferred career model. The preference is greatest when the priority of cost is also high. Managing the exception is the preferred career model when contribution to service mission and/or cost are overriding considerations.



**Figure I.7—Contribution to Service Mission
Weighted at 0 Percent; Other Objectives Vary**



**Figure I.8—Contribution to Service Mission
Weighted at 40 Percent; Other Objectives Vary**



**Figure I.9—Contribution to Service Mission
Weighted at 80 Percent; Other Objectives Vary**

J. Prioritizing Components of Objectives

This appendix contains the analysis of the effect of changing the priorities of the components within the objectives sought by each of the three perspectives. Major sections break out the three perspectives (individual officer's, user organization's, military service's); the next level of sections reflects the objectives sought by those holding each of the perspectives.

The Individual Officer's Perspective

Ability to Contribute

Figures J.1-J.3 show the effect of changing the priorities of the components under ability to contribute (amount of preparation, management resources, and sense of membership). The preferred career model is managing competencies; except where the overriding priority is on management resources. In that case, the preferred career model is managing leader succession.

Security

Figures J.4-J.6 show the effect of changing the priorities of the components under security (stability of career field, length of career, likelihood of a full career, strength of culture, and skill transferability). The first three components generally affect the preference for career models in the same way. Consequently, they are weighted equally within a subgroup, and the weight on that subgroup is then used to compare them with the other two components (strength of culture and skill transferability). This precludes the first three components from overwhelming the analysis except at the extremes. Managing competencies is the preferred career model when stability of career field, length of career, and likelihood of a full career are given less weight. As the priority on stability of career field, length of career, and likelihood of a full career increases, managing leader succession becomes preferred over managing competencies.

Rewards

Figures J.7-J.9 show the effect of changing the priorities of the components under rewards (direct pay, deferential treatment, and respect). Managing leader succession and managing competencies are the preferred career models. As the

priority of direct pay increases, the preference shifts from a career model that manages leader succession to one that manages competencies.

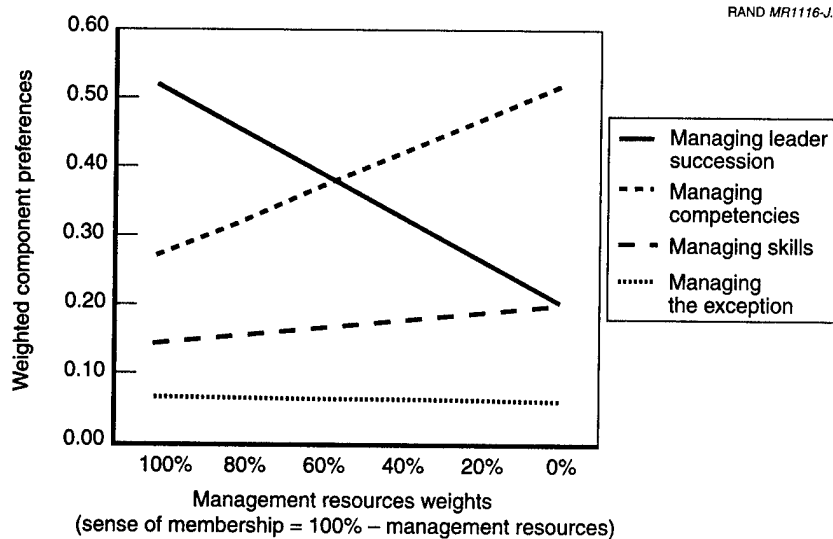


Figure J.1—Amount of Preparation Weighted at 0 Percent; Other Components Vary

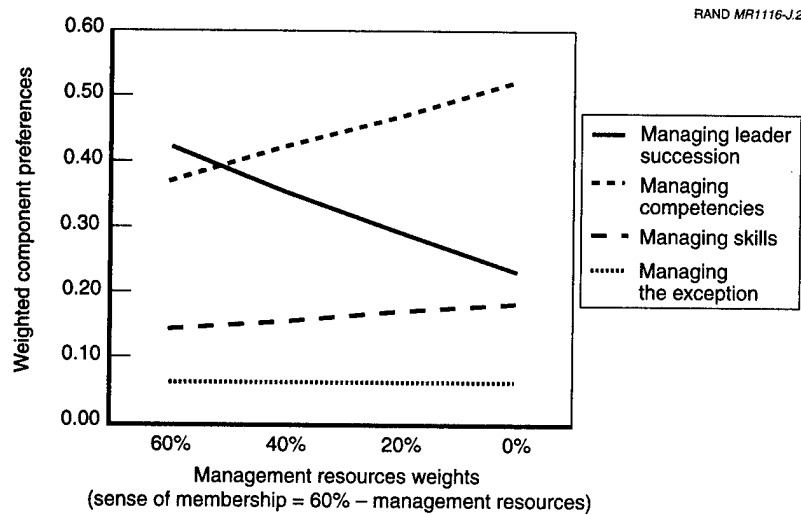


Figure J.2—Amount of Preparation Weighted at 40 Percent; Other Components Vary

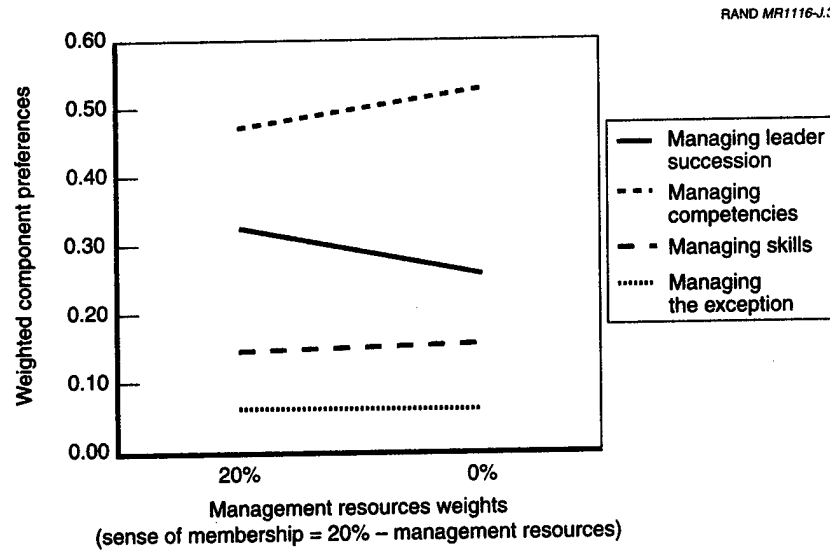


Figure J.3—Amount of Preparation Weighted at 80 Percent; Other Components Vary

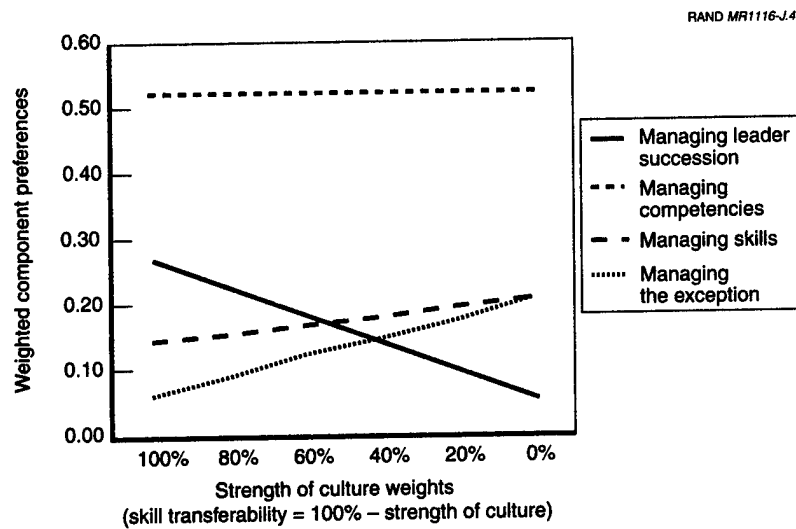


Figure J.4—Stability of Career Field, Length of Career, and Likelihood of Full Career Weighted at 0 Percent; Other Components Vary

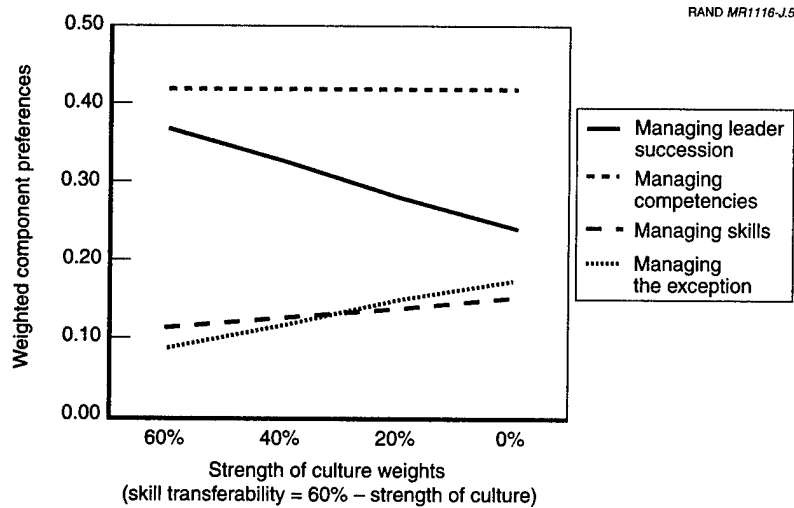


Figure J.5—Stability of Career Field, Length of Career, and Likelihood of Full Career Weighted at 40 Percent; Other Components Vary

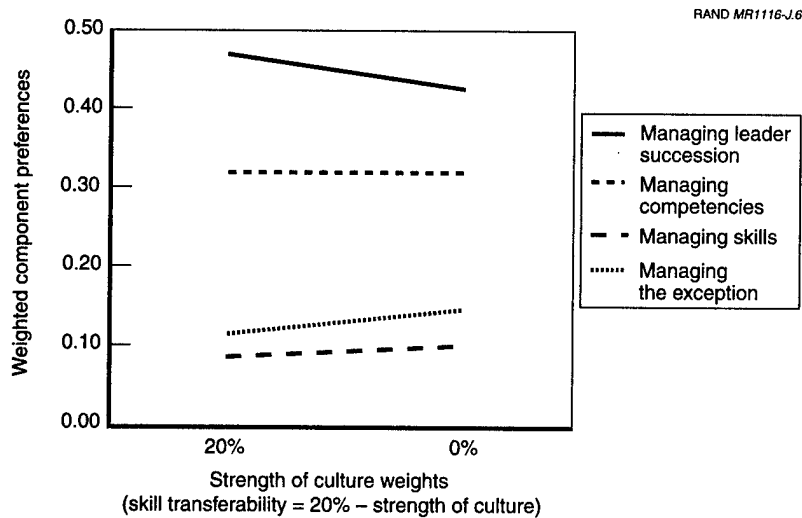


Figure J.6—Stability of Career Field, Length of Career, and Likelihood of Full Career Weighted at 80 Percent; Other Components Vary

RAND MR1116-J.7

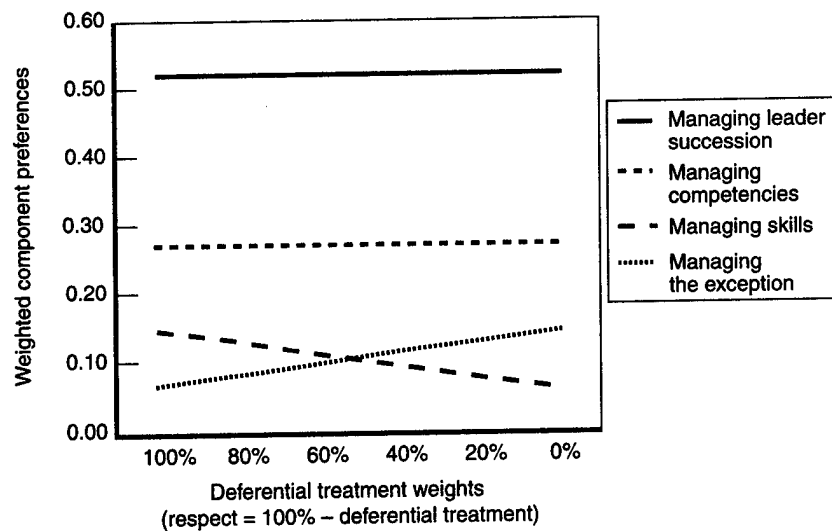


Figure J.7—Direct Pay Weighted at 0 Percent; Other Components Vary

RAND MR1116-J.8

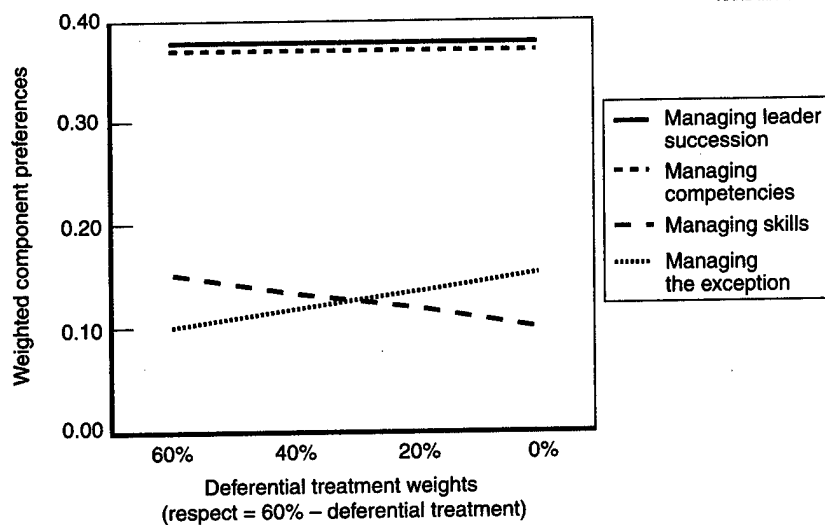
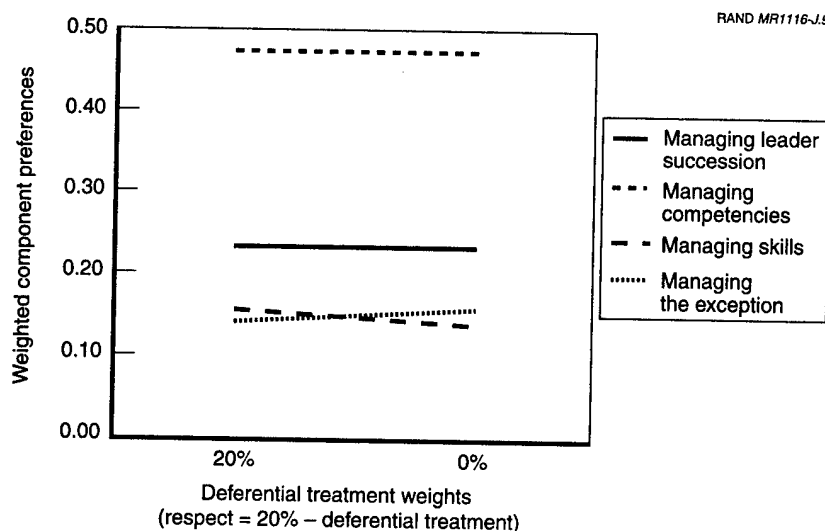


Figure J.8—Direct Pay Weighted at 40 Percent; Other Components Vary



**Figure J.9—Direct Pay Weighted at 80 Percent;
Other Components Vary**

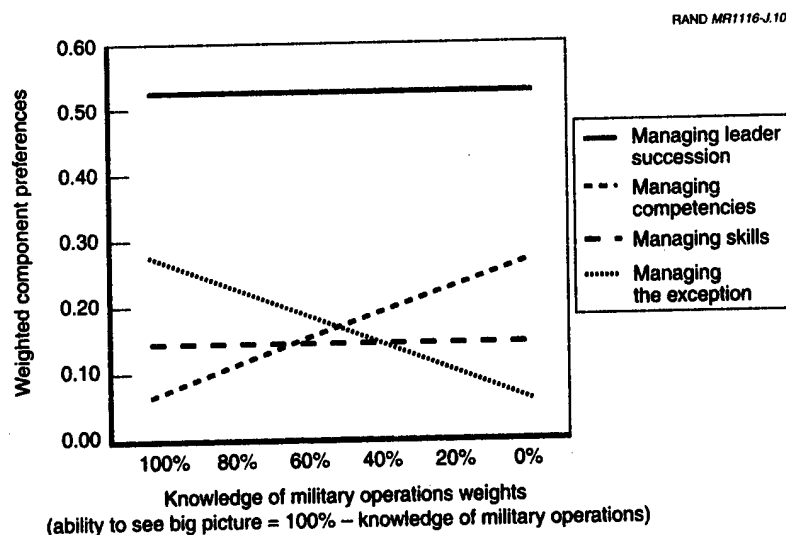
The User Organization's Perspective

Contribution to Mission

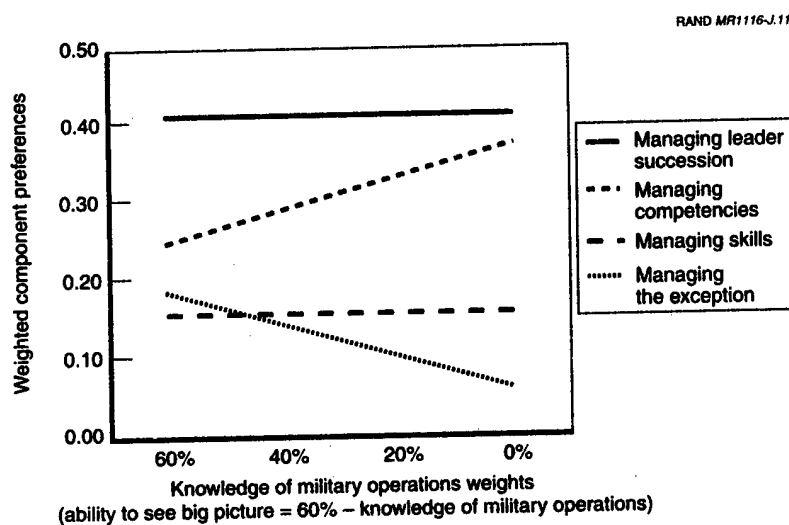
Figures J.10–J.12 show the effect of changing the priorities of the components under contribution to mission (standardization, specialization, knowledge of military operations, and ability to see big picture). The first two components generally affect the preference for career models in the same way. Consequently, they are weighted equally within a subgroup, and the weight on that subgroup is then used to compare them with the other two components (knowledge of military operations and ability to see big picture). This precludes the first three components from overwhelming the analysis except at the extremes. Managing leader succession is the preferred career model over nearly the entire range of priorities. Only when standardization and specialization are the overriding priorities does managing competencies emerge as the preferred career model.

Control of Resources

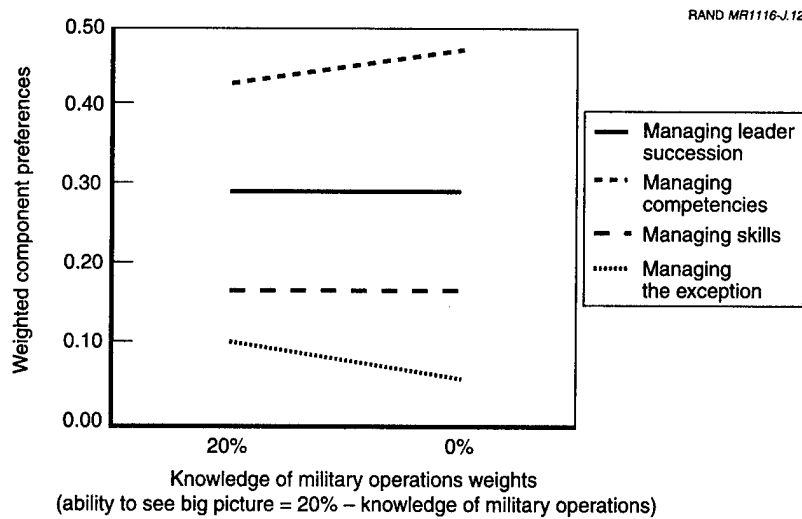
Figure J.13 shows the effect of changing the priorities of the components under control of resources (monitoring key variables and ability to influence change). Managing competencies is the preferred career model when monitoring key variables has a high priority; managing leader succession is the preferred career model when ability to influence change has a high priority.



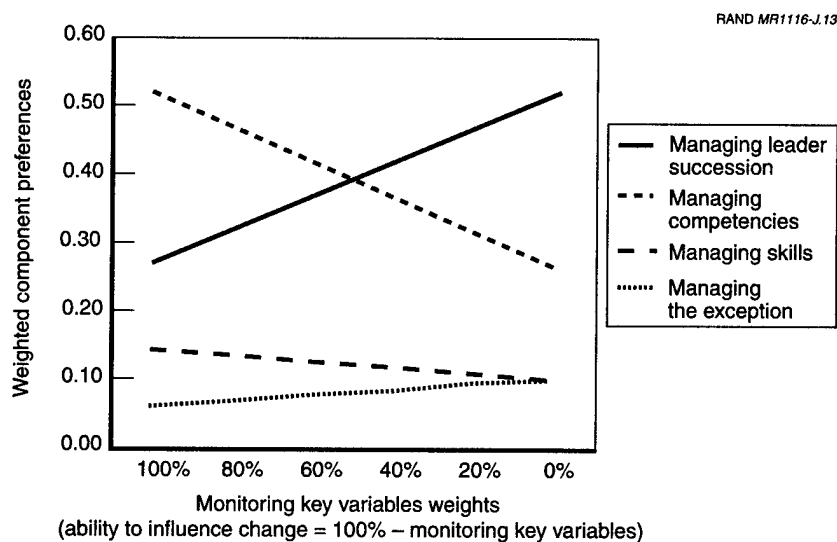
**Figure J.10—Standardization and Specialization
Weighted at 0 Percent; Other Components Vary**



**Figure J.11—Standardization and Specialization
Weighted at 40 Percent; Other Components Vary**



**Figure J.12—Standardization and Specialization
Weighted at 80 Percent; Other Components Vary**



**Figure J.13—Components of Ability to Control
Resources Vary**

Cost

Figures J.14–J.16 show the effect of changing the priorities of the components under cost (management resources, communication/coordination, and alignment with mission). Managing the exception is the preferred career model over a wide range of priorities, particularly when alignment with mission is

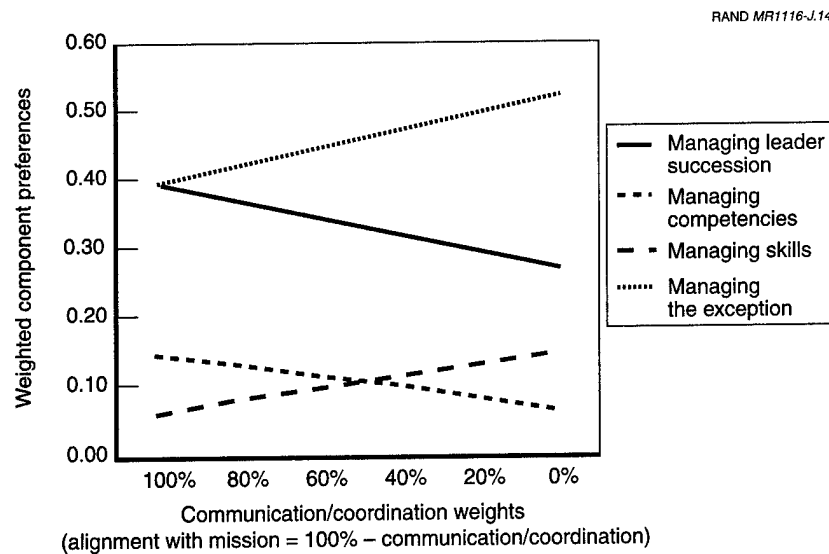


Figure J.14—Management Resources Weighted at 0 Percent; Other Components Vary

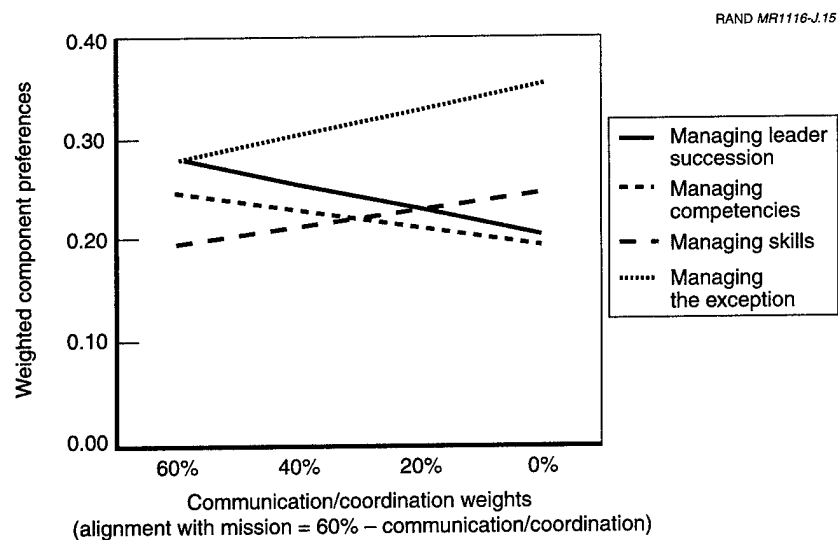


Figure J.15—Management Resources Weighted at 40 Percent; Other Components Vary

given more weight. Managing leader succession and managing the exception are equally preferred when the overriding priority is communication/coordination. Managing competencies and managing skills become the preferred career models when the overriding priority is management resources.

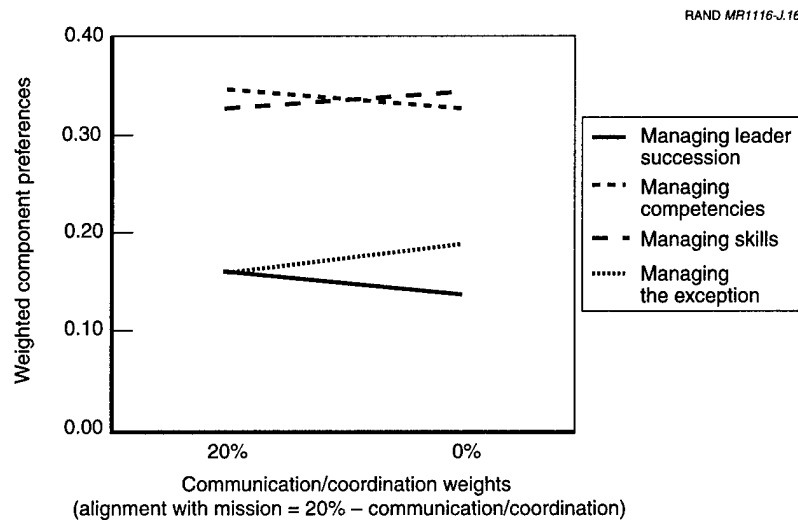


Figure J.16—Management Resources Weighted at 80 Percent; Other Components Vary

The Military Service's Perspective

Contribution to Service Mission

Figures J.17–J.19 show the effect of changing the priorities of the components under contribution to service mission (value of specialization, availability of officer, alignment with mission, and flexibility to meet needs). Managing the exception is the preferred career model. Only when alignment with mission is the overriding priority does managing leader succession become equally preferred.

Resource Management

Figures J.20–J.22 show the effect of changing the priorities of the components under resource management (control of resources, ease of management, and management effectiveness). Managing competencies is the preferred career model over nearly the entire range of priorities. Managing skills is preferred if ease of management is highly weighted.

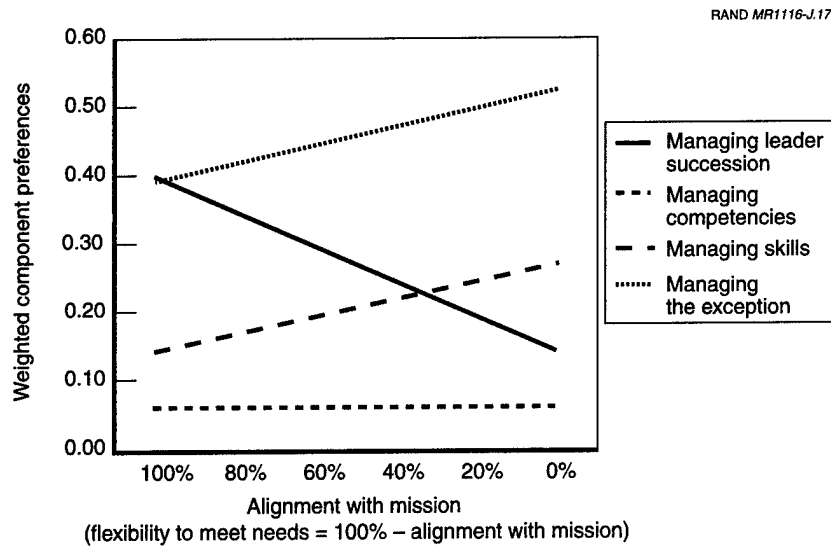


Figure J.17—Value of Specialization and Availability Weighted at 0 Percent; Other Components Vary

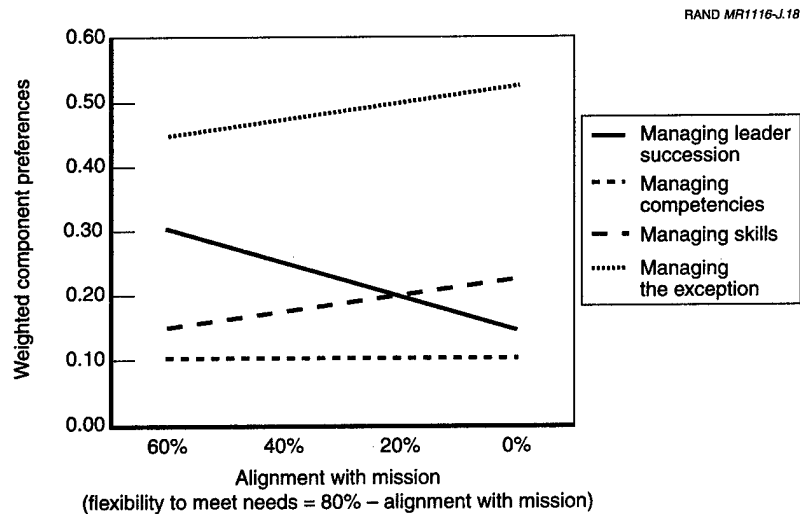


Figure J.18—Value of Specialization and Availability Weighted at 40 Percent; Other Components Vary

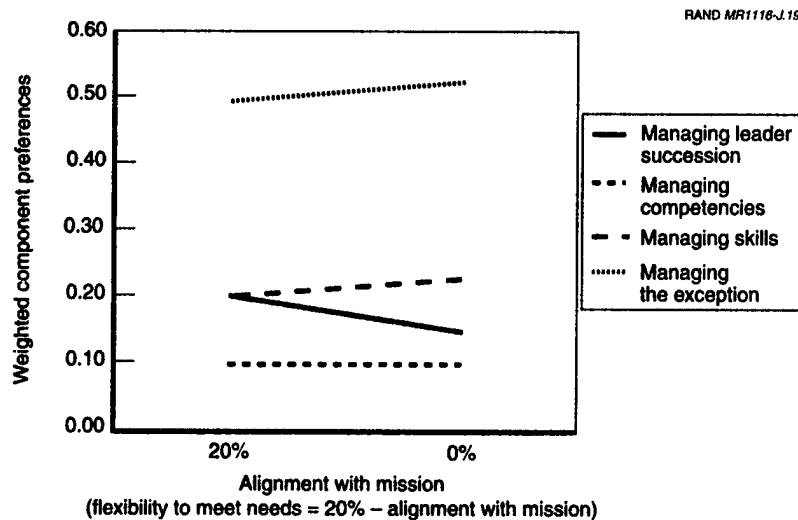


Figure J.19—Value of Specialization and Availability Weighted at 80 Percent; Other Components Vary

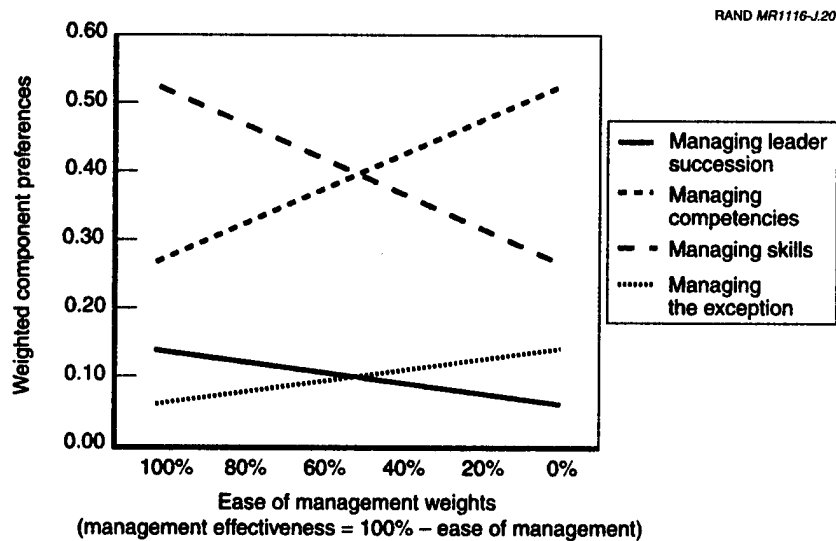


Figure J.20—Control of Resources Weighted at 0 Percent; Other Components Vary

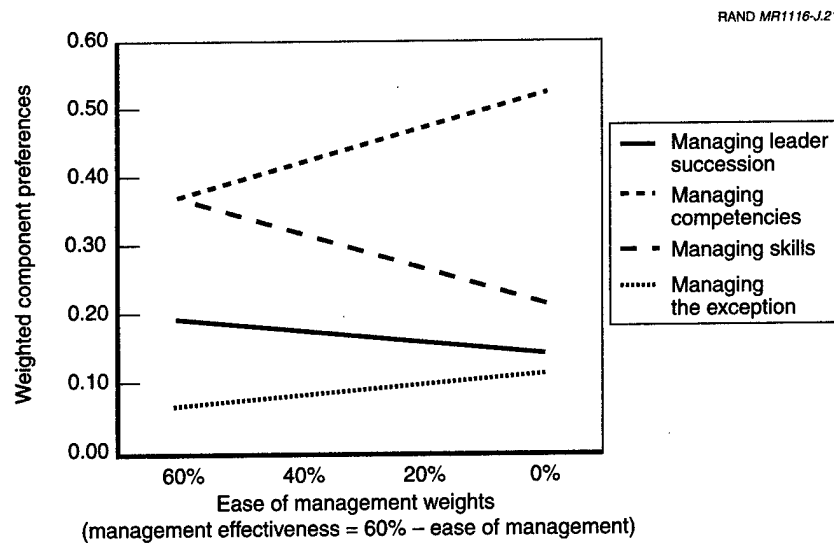


Figure J.21—Control of Resources Weighted at 40 Percent; Other Components Vary

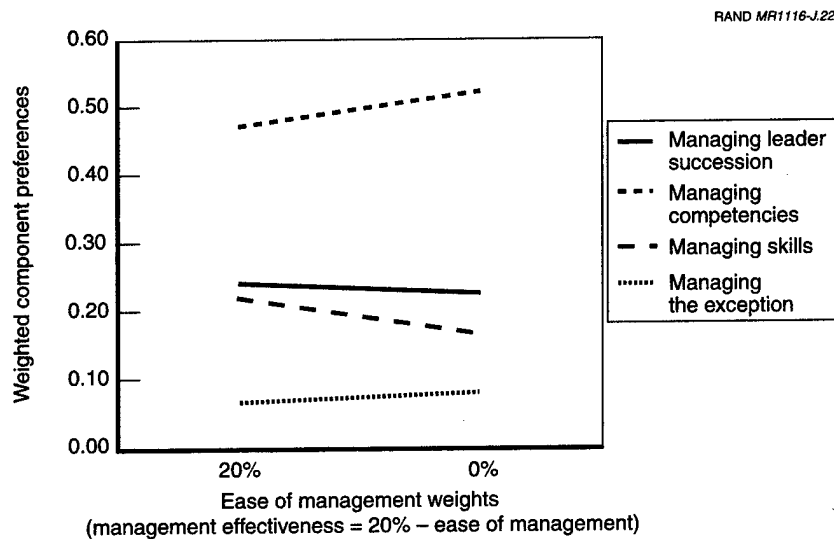


Figure J.22—Control of Resources Weighted at 80 Percent; Other Components Vary

Cost

Figures J.23–J.25 show the effect of changing the priorities of the components under cost (management overhead, complexity, and financial cost). Managing the exception is the preferred career model, except when complexity is highly weighted, in which case managing competencies becomes the preferred career model.

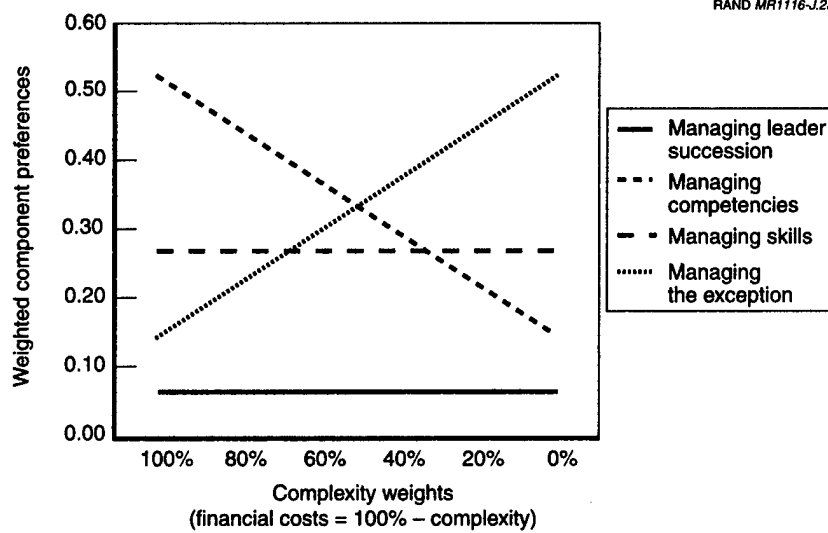


Figure J.23—Management Overhead Weighted at 0 Percent; Other Components Vary

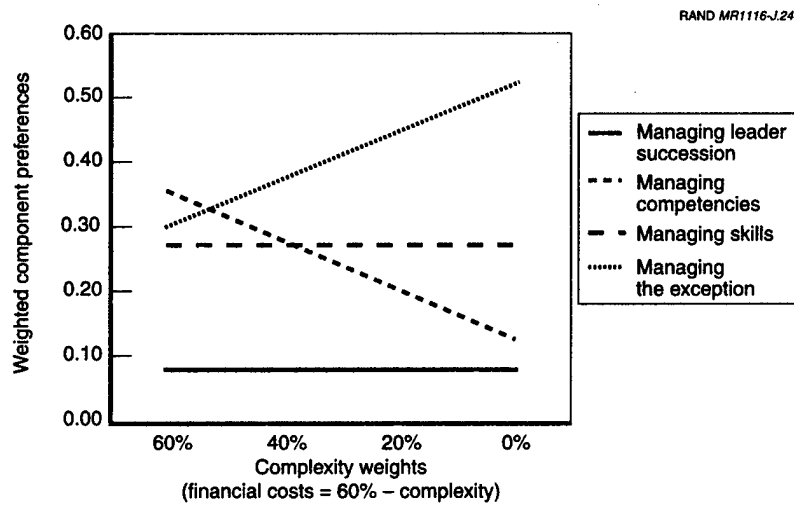


Figure J.24—Management Overhead Weighted at 40 Percent; Other Components Vary

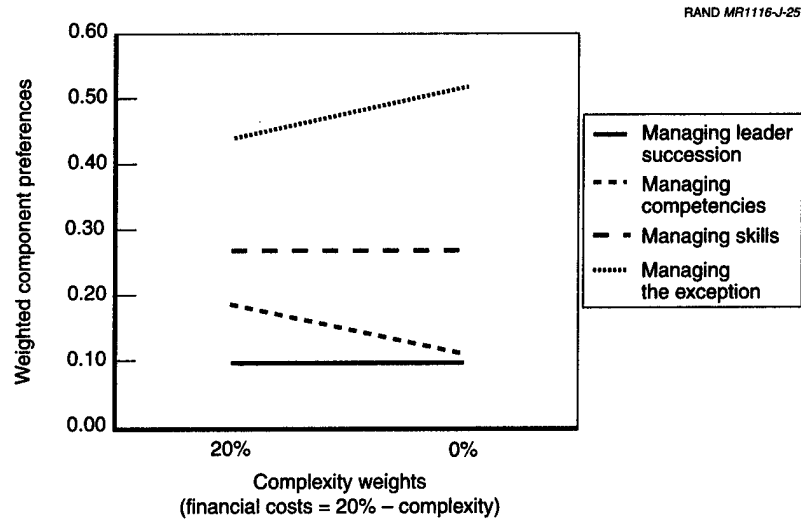


Figure J.25—Management Overhead Weighted at 80 Percent; Other Components Vary

K. Integrating Results

When investigating the effects of changing the weights (priorities) applied to the different perspectives (individual officers, user organizations, and military services), we weighted the objectives sought by those holding each perspective and the components of the objectives equally. When investigating the effects of changing the weights applied to the different objectives sought by those holding each perspective, we weighted the components of the objectives equally. Finally, we investigated the effects of changing the weights applied to the components. This appendix integrates the results of the above analyses by allowing the weights to vary within all three categories.

Generally, we found that for user organizations and military services, specific weights could lead to a preference for each career model. For individual officers, however, no combination of weights could lead to a preference for career models that manage skills or manage the exception.

For individual officers, Table K.1 summarizes the results of the analysis in the first subsection of Appendixes I and J. As Table K.1 shows, with respect to the objective "ability to contribute," managing competencies is generally the preferred career model over nearly all possible weights of the components. When concern about the availability of career management resources has the overriding priority (i.e., it is weighted at 100 percent), managing leader succession becomes the preferred career model. With respect to the objective "security," when the combination of stability of career field, length of career, and likelihood of full career are highly weighted, managing leader succession is the preferred career model; when that combination is given low weight, managing competencies is the preferred career model. Finally, with regard to the objective "rewards," when direct pay is weighted, managing competencies is the preferred career model; when it is highly weighted, managing leader succession is the preferred career model. Managing skills and managing the exception are preferred under no combination of weights.

From the perspective of the individual officer, managing leader succession is the preferred career model when those holding this perspective place a high priority on security in the form of stability of career field, length of career, and likelihood of full career and/or *indirect* rewards (deferential treatment and respect). Managing competencies is the preferred career model when those holding this

Table K.1
Individual Officers: Results of Sensitivity Analysis

RAND MR1116-K.1

Effect of Weights on Preference for Career Models				
Individual officer	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Ability to contribute	Preferred	Generally preferred		
Amount of preparation				
Management resources	When high			
Sense of membership				
Security	Preferred	Preferred		
Stability of career field				
Length of career	When high	When low		
Likelihood of full career				
Strength of culture				
Skill transferability				
Rewards	Preferred	Preferred		
Direct pay	When low	When high		
Deferential treatment				
Respect				

perspective place a high priority on ability to contribute (and its components generally) or on security in the form of strength of culture, skill transferability, and/or direct rewards.

For user organizations, Table K.2 summarizes the results of the analysis. As Table K.2 shows, with respect to the objective "contribution to mission," managing leader succession is generally the preferred career model over nearly all possible weights of the components. When the combination of standardization and specialization has a high priority, managing competencies is the preferred career model. With respect to the objective "ability to control resources," when the user organization's ability to influence change has the greatest priority, managing leader succession is the preferred career model; when the user organization's ability to monitor key variables has the greatest priority, managing competencies is the preferred career model. With respect to the objective "cost," managing the exception is generally the preferred career model over nearly all possible weights of the components. When communication/coordination have the overriding priority, managing leader succession and managing the exception are preferred equally. When the user organization's ability to effectively manage resources has the overriding priority, managing competencies and managing skills are preferred equally.

From the perspective of the user organization, managing leader succession is the preferred career model when those holding this perspective place a high priority on contribution to mission (and its components generally) and/or on ability to

Table K.2
User Organizations: Results of Sensitivity Analysis

RAND MR1116-K.2

Effect of Weights on Preference for Career Models				
User Organization	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Contribution to mission	Generally preferred	Preferred		
Standardization		When high		
Specialization				
Knowledge of military operations				
Ability to see the big picture				
Ability to control resources	Preferred	Preferred		
Monitoring key variables		When high		
Ability to influence change	When high			
Cost	Equally preferred	Preferred		Generally preferred
Management resources		When high		
Communication/coordination	When high			
Alignment with mission				

control resources (particularly when the ability to influence change is important). Managing competencies is the preferred career model when those holding this perspective place a high priority on contribution to mission (particularly when standardization and specialization are important) and/or on ability to control resources (particularly when the ability to monitor key variables is important). A variety of priorities among components and among the objectives can lead to either managing leader succession or managing competencies as the preferred career model; the priorities that lead to managing the exception or managing skills as the preferred career model are much more limited. Managing the exception is the preferred career model when those holding this perspective place a high priority on cost (and its components generally). Managing skills is the preferred career model (equally preferred to managing the exception) for those holding this perspective only when cost is the overriding objective and when management resources are the overriding component (a very restrictive set of objectives and components).

For the military services, Table K.3 summarizes the results of the analysis. Table K.3 shows, with respect to the objective "contribution to service mission," managing the exception is generally the preferred career model over nearly all possible weights of the components. When alignment with mission has the overriding priority, managing leader succession is the preferred career model. With respect to the objective "resource management," managing competencies is generally the preferred career model over nearly all possible weights of the components. When ease of management has a high priority, managing skills is preferred. With respect to the objective "cost," managing the exception is

Table K.3
Military Service: Results of Sensitivity Analysis

RAND MR1116-K.3

Effect of Weights on Preference for Career Models				
Military Service	Managing Leader Succession	Managing Competencies	Managing Skills	Managing the Exception
Contribution to service mission	Equally preferred			Generally preferred
Value of specialization				
Availability of officer				
Alignment with the mission	If 100%			
Flexibility to meet needs				
Resource management		Generally preferred	Preferred	
Control of resources				
Ease of management			When high	
Management effectiveness				
Cost		Preferred		Generally preferred
Management overhead				
Complexity		When high		
Financial costs				

generally the preferred career model over nearly all possible weights of the components. When complexity has a high priority, managing competencies is the preferred career model.

From the perspective of the military service, managing the exception is the preferred career model when those holding this perspective place a high priority on contribution to service mission (and its components generally) and/or on cost (and its components generally). Managing skills is the preferred career model when those holding this perspective place a high priority on resource management (particularly when ease of management is important). Managing competencies is the preferred career model when those holding this perspective place high priority on resource management (and its components generally) and/or on cost (particularly when complexity is important). Managing leader succession is the preferred career model (equally preferred to managing the exception) for those holding this perspective only when contribution to service mission is the overriding objective and when alignment with service mission is the overriding component (a very restrictive set of objectives and components).

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